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CHECKLIST

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# An annotated plant checklist of the transboundary volcanic Mt Elgon, East Africa

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## Abstract

Mt Elgon is an ancient transboundary volcanic mountain found at the Kenya-Uganda boarder possessing high plant diversity. This study documents an updated checklist of the mountain's vascular plants obtained through random-walk field excursions and retrieval of herbarium specimen tracing back to 1900. We compiled 1709 species from 673 genera in 131 families. One new species of the family Cucurbitaceae was also reported. This checklist records respective habitat, habits, elevation ranges, voucher numbers and global distribution ranges of each species. Native and exotic species were also distinguished, where 8.4% of the total species in 49 families were exotic species. There were 103 endemic species, while 14 species were found to be both rare and endemic. IUCN conservation status revealed 2 Critically Endangered, 4 Endangered, 9 Vulnerable and 2 Near Threatened species. This study presents the first and most comprehensive plant inventory of Mt Elgon that will facilitate further ecological and phylogenetic studies.

## Keywords

Checklist, conservation, distribution, Mt Elgon, plant species

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## Introduction

Plants form part of the most fundamental natural resources offered by nature. They provide essential requirements for life including fuel, food, medicine, fodder, timber, oils, and resins (Price 1998; Muhweezi et al. 2007; Okello et al. 2010; Mutie et al. 2020). Plants' communities also play a key role in maintaining the general biodiversity (flora and fauna) as well as being significant in environmental conservation necessary for attaining sustainable environmental management (Mutie et al. 2020b). The first step in effective conservation and sustainable use of natural resources is acknowledging their existence and distribution (Gaston 2000; Sosef et al. 2017). Researchers across the world have been keen to conduct surveys, collect samples and store the acquired data (where and when the specimen was seen and collected) and a physical proof of the plant in the form of dried specimens in different herbaria of the world. Herbaria are major physical storage facilities of essential primary plant data in dried form or in a liquid such as alcohol (Bebber et al. 2010). So far, over 350,000,000 specimens have been curated and preserved in various herbaria (Sosef et al. 2017). Plant checklists offer foundational data in analysing ecological, evolutionary and biogeographical hypothesis used to determine land use management and environmental assessment policies

governing biodiversity (Zhou et al. 2018). This is evident in the existence of a plethora of biodiversity databases hosting thousands of museum records and observations of species made during field excursions (Boyle et al. 2013). Mistakes during the compilation of checklists may trigger continuous environmental deterioration as a result of erroneous biodiversity policy conclusions. Therefore, conducting floristic surveys and documenting checklists is important in understanding these natural resources for economic development in both developed and developing countries.

Mountains, estimated to be 8,616 in number globally, are among the unique and diverse physical features of the world found in all continents, accounting for about 20–24% of the terrestrial surface area (Beniston 2000; Körner et al. 2006; Snethlage et al. 2022). Compared to flat lands, montane regions have rich biodiversity with high rates of species extinction and speciation, as well as regions of low immigration rates (Jacob et al. 2015; Lomolino 2016). These mountain ecosystems are also hotspots of biodiversity harboring rare and endemic species (Lomolino 2001; Kessler and Kluge 2008; Jacob et al. 2015). Field excursions and ecological studies have revealed that the high plant diversity found in mountains can be attributed to the different vegetation stratification, brief ecotones, enormous beta diversity, dynamic environmental factors, isolation, and climatic variation within a limited geographical range as result of altitudinal differences over a short horizontal distance (Hamilton 1975; Crausbay and Martin 2016). Furthermore, mountains are, in part, determinant factors of the floristic composition, economic activities, social activities, and climatic condition of the surrounding regions (Price 1998; Wu et al. 2020).

African mountains host species rich regions of the world. Several biodiversity hotspots have been identified within the African tropics including the eastern Afromontane biodiversity hotspot, the Eastern Arc Mountains, and the Coastal Forest Ecosystem (Myers et al. 2000; CEPF 2012). In East Africa, the majority of these mountains under the Eastern Afromontane biodiversity hotspot are of volcanic origin, including Mt Elgon, Meru, Kenya, Kilimanjaro, and Abardare ranges (CEPF 2012). However, their diversity is at high risk of extinction due to overexploitation, climate change, and habitat destruction (Stévart et al. 2019). Several floristic studies have been recently reported on mountains with the aim of formulating priority conservation polices (Mbuni et al. 2019; Kipkoech et al. 2020; Watuma et al. 2022; Zhou et al. 2022). However, transboundary mountains have encountered prolonged research barriers emanating from ethical and political disputes (Roga 2017). In East Africa, an example of a transboundary mountain that experienced conflicts is Mt Elgon (Petursson and Vedeld 2015). Several transboundary cooperations have been formulated and successfully mitigated cross-country disputes (Roga 2017). Mt Elgon was categorized as a Biosphere reserve in 2003 on the Kenyan side and in 2009 as a man and biosphere reserve for the Ugandan side by the United Nations Educational, Scientific and Cultural organization (UNESCO), because of its cultural significance, considerable plant diversity comprising of rare and endemic species of Afromontane flora, and its role as a water catchment area with more than two million people relying on it for livelihood (UWA 2000). However, depletion of its natural resources by local communities,

wild fire caused by poachers, and encroachment to expand agricultural land has been escalating over time (Roga 2017). In addition, human conflicts have frequently been reported from the Kenyan side of Mt Elgon. For instance, conflicts intensified between the years 2006–2008 with the formation Sabaot Land Defense Forces that resulted in the death of more than 600 people, which consequently limited scientific exploration (Simiyu 2008).

Mt Elgon is among the oldest floristic regions in East Africa tracing back to about 22 million years ago and possesses the world's largest intact caldera (UWA 2000). It forms part of the lake Victorian regional mosaic, which stretches through Rwanda, Uganda, Burundi and portions of Tanzania and Congo (Mukhwana 2002). Initial floristic studies on the mountain trace back to the 1910s with a study on the crater vegetation (Dummer 1919). Further explorations were done in the 1930s where 649 species were collected of which 32 were new species by Bullock (1932; 1933). Since then, the fascinating flora of Mt Elgon has been vastly studied by a number of botanists (Dale 1940; Hedberg 1955, 1957, 1964; Langdale-Brown et al. 1964; Synnott 1968; Tweedie and Agnew 1970; Hamilton 1975; Tweedie 1976; Hamilton and Perrott 1981; Beck et al. 1987; van Heist 1994; Davenport et al. 1996; Reed and Clokie 2000; Wesche 2002; Bakamwesiga et al. 2005; Russell et al. 2017). Significantly, Tweedie and Agnew (1970) reviewed Lugard's initial plant samples of Mt Elgon, Dale in 1940 studied the forest types, while Tweedie (1976) classified plants according to their different habits. Hamilton and Perrott (1981) studied the altitudinal vegetation zones; van Heist in 1994 produced an aerial map; Reed and Clokie (2000) documented the effects of grazing and cultivation on forest communities; and Wesche in 2002 recorded the different plant communities of Mt Elgon. Okello et al. (2010) reported the ethnobotanical significance of Mt Elgon species to the Sabaoti community, while Russell et al. (2017) documented the forest trends and implication of governance regimes. Wanyama et al. (2020) implored remote sensing techniques to evaluate the vegetation cover of Mt Elgon, reporting cases of browning and greening with key drivers being human activities and natural occurrences. Masayi et al. (2021) studied forest degradation in Mt Elgon. This mountain ecosystem has been of interest due to its old age and physical isolation from other high montane regions despite conflicts emanating from its transboundary location between two countries (Kenya and Uganda). These studies all agree that Mt Elgon hosts a unique ecosystem that forms part of the African Afromontane centre of endemism. However, the number of species reported in this ecosystem has been changing over time (Bakamwesiga et al. 2005; MUIENR and NMK 2005).

The absence of a comprehensive up-to-date checklist hampers priority species conservation and implementation of biodiversity management policies in Mt Elgon. The present study aims to fill the knowledge gap by documenting an elaborate plant species checklist of Mt Elgon that: (i) distinguishes between native and exotic plants and their distribution ranges; (ii) evaluates the conservation status of extant taxa; and (iii) identifies rare and endemic species found in Mt Elgon. This study is fundamental in further evaluating phylogenetic diversity and ecological studies. This will be significant in formulating and implementation of conservation policies for the ecosystems of Mt Elgon.

## Materials and methods

### Study site

Mt Elgon is an extinct, solitary, transboundary volcanic mountain at the Kenya and Uganda border. It is located at 1°08'N, 34°45'E (Fig. 1). In the Kenyan side, it stands on Mt Elgon and Trans-Nzoia Counties on the western part of the country, whereas it lies in two provinces in Uganda, Kapchorwa and Mbale, on the Eastern side of the country (Fig. 1). It covers about 112,898 ha of land, which is the largest base area among East Africa volcanic mountains, stretching about 80 km from north to south and about 50 km from east to west (Muhweezi et al. 2007). It has an 8 km wide crater at the top and rises to a height of 4321 m asl with a gentle slope angle of less than 4° on average. Mt Elgon is believed to have once been the highest peak in Africa, but due to volcanic rock weathering, it is now the fourth highest mountain in East Africa and the eight highest in Africa. Significantly, it is the oldest among the East African volcanic mountains on the East African peneplain formed during the Miocene epoch about 24 million years ago (Lippard 1973; Baker et al. 1971).

The climate of Mt Elgon is characterized by two alternating seasonal air streams. The moist southwesterly and the dry northeasterly air streams provide it a bimodal pattern of rainfall (Okello et al. 2010; Obiri 2014). The months between April and October are the wettest with short dry seasons in June and July. The driest season occurs from November to February. Generally, the mountain receives an annual rainfall of 2700 mm, which is higher to the southern side (that receives about 2000 mm of precipitation annually) than to the northern side that records an annual precipitation of 1500 mm (Bussmann 2006). Maximum rainfall is experienced in the forest zone in the lower and mid altitudes. In the higher altitudes, rain falls in the form of drizzle rather than heavy downpours. Temperature ranges vary between 27–30 °C at the higher limit and 15–17 °C at the lower limit. As the altitude increases, the climatic conditions become more temperate and less seasonal. Distinctively in the alpine zone, temperatures drop to as low as 0 °C. Mt Elgon experiences wet and humid conditions throughout the year predicting a rich composition of woody climbers and epiphytes (Hitimana et al. 2004; Okello et al. 2010; Jiang et al. 2014). It is divided into vegetation zones including (i) mixed montane forests up to 2500 m, (ii) bamboo and low canopy montane forest at 2500–3000 m asl, (iii) high montane heath at 3000–3500 m, and (iv) moorland above 3500 m to the peak (Dale 1940; Howard 1991; van Heist 1994).

In 1932, Mt Elgon forest was gazetted as a montane forest, under the Ministry of Environment & Natural Resources (MENR). The forest covers 73,705 ha while that within the national park covers 16,900 ha on the northeastern slope of the mountain managed by the Kenya Wildlife Service (Petursson et al. 2013). On the Ugandan side, Mt Elgon forest is exclusively a National Park covering approximately 1,121 $km^2$ having a park boundary of 211 km long (Sassen and Sheil 2013). The park is bordered

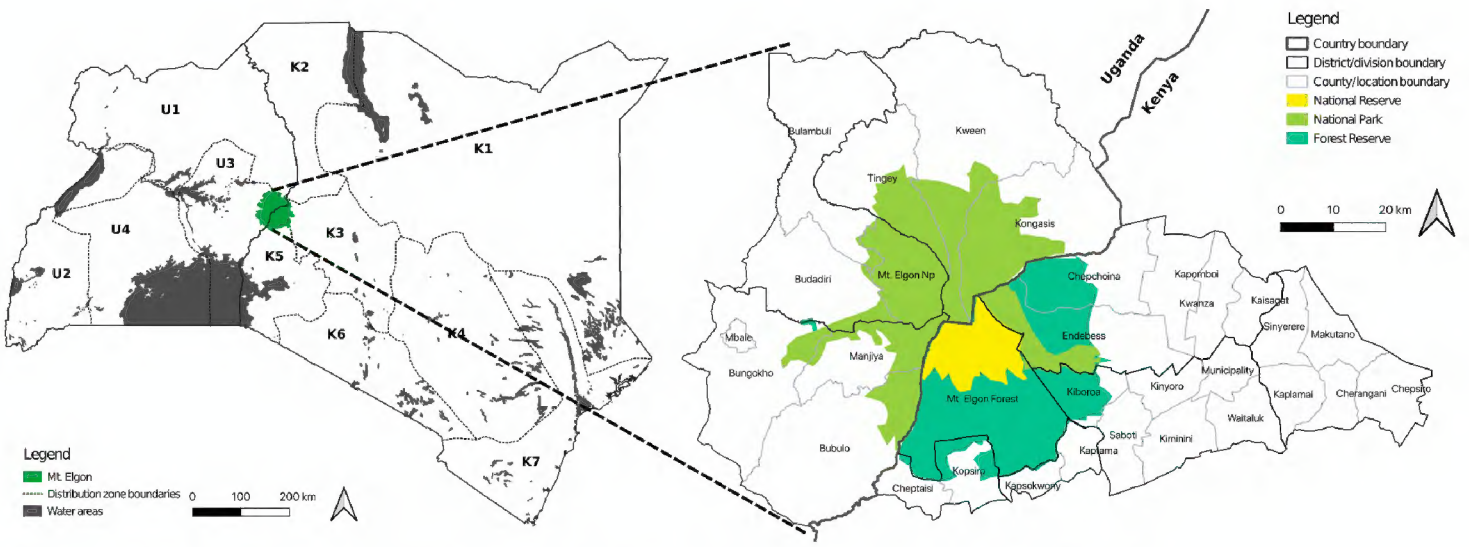


**Figure 1.** Floristic divisions of Kenya and Uganda and the location of Mt Elgon.

by eight districts, making human encroachment into the forest ecosystem inevitable. In 1993, Mt Elgon in Uganda was re-assigned to being a National Park from a National Reserve formerly designated and gazetted in 1929.

## Data collection

We assembled an inclusive database of plants of Mt Elgon from field excursions tracing back to the 1900s. The Sino-Africa Joint Research Centre in collaboration with the National Museums of Kenya conducted field excursions between the year 2017 and 2019 in the vast Mt Elgon ecosystem. Plant specimen assembling were done using the random-walk survey where fertile plants sample (in fruiting or flowering stages) were collected in triplicates. Onsite plants and habitat characteristics were recorded and specimen voucher numbers assigned alongside scientific and/or local names, location, and collection date. Specimens were preserved by pressing and drying. Assigned scientific names were later confirmed using standard references (FTEA editors 1952–2012; Blundell 1987; Agnew and Agnew 1994; Agnew 2013). The identified and labelled herbarium specimens were stored at the East African herbarium in Kenya (EA) and duplicates transferred to the Hubei Institute of Botany herbarium (HIB), in China.

For inclusive tabulation of vascular plants of Mt Elgon, previous plant collections dating back to 1900 were retrieved from various online herbaria, field guides and published floras, such as Kenya Trees Shrubs and Lianas (Beentje 1994), Wild Flowers of East Africa (Blundell 1987), Flora of Tropical East Africa (FTEA editors 1952–2012), and Upland Kenya Wild Flowers and Ferns (Agnew 2013), as well as checklists (Bullock 1932, 1933; Tweedie 1976). We also retrieved information on habitat, altitudinal distribution ranges, collectors and voucher specimen numbers to augment our collections. In the cases of unavailable vouchers, descriptive monographs were cited. Corresponding herbaria hosting voucher specimens were indicated by their respective acronyms according to the Index

Herbariorum (http://sweetgum.nybg.org/science/ih/). Distribution ranges of each taxon were extrapolated to be within the maximum and minimum possible record in relation to altitudinal ranges of Mt Elgon. Based on our collections, life forms were assigned as herbs, shrubs, climbers, lianas and trees following Agnew (2013) and Beentje (2016). Herbarium and additional collections from checklists and monography were categorized into different lifeforms based on standard references (FTEA editors 1952–2012; Blundell 1987; Agnew and Agnew 1994; Agnew 2013). Scientific name circumscription, classes and families of all assembled taxa were checked against the International Plant Name Index (IPNI 2022) (https://www.ipni.org/), Plants of the World Online (POWO 2022) (https://powo.science.kew.org), and Tropicos (Tropicos 2022) (https://www.tropicos.org).

Conservation status of each taxon were assigned as either Critically Endangered (CR), Endangered (EN), Vulnerable (VU) or Near Threatened (NT) based on International Union for Conservation of Nature criterion (IUCN) Red list of threatened species (IUCN 2021) (https://www.iucnredlist.org). In addition, taxa endemism was determined based on literature citation and online distribution ranges according to the Global Biodiverity Information Facility (https://www.gbif.org). We also inferred whether the taxa compiled was native or exotic.

## Results

### Species composition

This study presents an expansive checklist of the flora of Mt Elgon constituting 1709 taxa (1589 species, 75 subspecies and 45 varieties) representing 673 genera in 131 families. The plant taxa were classified into five classes, namely: Magnoliopsida 1230 species (72%), Liliopsida 396 species (23%), Polypodiopsida 72 (4%), Lycopodiopsida 7 species (0.4%), and Pinopsida 4 species (0.2%) (Table 1). On comparison, the top 20 most species rich families recorded include; Asteraceae (191), Fabaceae (168), Orchidaceae (114), Poaceae (98), Lamiaceae (79), Cyperaceae (59), Rubiaceae (58), and Acanthaceae (45 species) (Table 2). The top species-rich genera were *Cyperus* (31), *Asplenium* (29), *Crotalaria* (27), *Habenaria* (25), *Helichrysum* (24), and *Coleus* (21) (Table 2). During field excursions between the year 2018 and 2019, a new species of the family Cucurbitaceae in the genus *Peponium* was discovered (*Peponium elgonense*; Mutie et al. 2020). We also made herbarium collections and took photographs of plants endemic to Mt Elgon, as well as rare and endemic, regional endemic, and exotic species (Fig. 2).

**Table 1.** Number of plant families, genera, species, varieties and subspecies present in each class.

| Class | Families | Genera | Species | Varieties | Subspecies |
|---|---|---|---|---|---|
| Magnoliopsida | 98 | 502 | 1230 | 39 | 61 |
| Liliopsida | 19 | 136 | 396 | 6 | 13 |
| Polypodiopsida | 9 | 28 | 72 | 0 | 1 |
| Lycopodiopsida | 3 | 4 | 7 | 0 | 0 |
| Pinopsida | 2 | 3 | 4 | 0 | 0 |

**Table 2.** The 20 highest species-rich families and genera recorded from Mt Elgon.

| Family | No species | No of genera | Genus | No of species |
|---|---|---|---|---|
| Asteraceae | 191 | 68 | *Crotalaria* L. (Fabaceae) | 27 |
| Fabaceae | 168 | 48 | *Habenaria* Willd. (Orchidaceae) | 25 |
| Orchidaceae | 114 | 31 | *Helichrysum* Mill. (Asteraceae) | 24 |
| Poaceae | 98 | 50 | *Coleus* Lour. (Lamiaceae) | 21 |
| Lamiaceae | 79 | 25 | *Indigofera* L. (Fabaceae) | 18 |
| Cyperaceae | 59 | 7 | *Solanum* L. (Solanaceae) | 20 |
| Rubiaceae | 58 | 24 | *Asplenium* L. (Aspleniaceae) | 29 |
| Acanthaceae | 45 | 17 | *Euphorbia* L. (Euphorbiaceae) | 16 |
| Apocynaceae | 39 | 23 | *Commelina* Plum. ex L. (Commelinaceae) | 14 |
| Malvaceae | 36 | 13 | *Carex* L. (Cyperaceae) | 15 |
| Asparagaceae | 34 | 10 | *Cyperus* L. (Cyperaceae) | 31 |
| Aspleniaceae | 29 | 1 | *Lobelia* Plum. ex L. (Campanulaceae) | 14 |
| Euphorbiaceae | 29 | 8 | *Polystachya* Hook. (Orchidaceae) | 14 |
| Commelinaceae | 27 | 4 | *Eulophia* R.Br. (Orchidaceae) | 13 |
| Orobanchaceae | 26 | 9 | *Trifolium* Tourn. ex L. (Fabaceae) | 12 |
| Apiaceae | 25 | 18 | *Senecio* L. (Asteraceae) | 10 |
| Campanulaceae | 24 | 4 | *Impatiens* Riv. ex L. (Balsaminaceae) | 10 |
| Solanaceae | 24 | 5 | *Vigna* Savi (Fabaceae) | 11 |
| Rosaceae | 18 | 5 | *Swertia* L. (Gentianaceae) | 10 |
| Iridaceae | 17 | 8 | *Hypericum* Tourn. ex L. (Hypericaceae) | 10 |

**Figure 2.** Photographs of specimens collected from Mt Elgon **A (i,ii,iii)** *Peponium elgonense* (new species) **B** *Swertia crassiuscula* (regional endemic) **C** *Plantago lanceolata* (exotic) **D** *Indigofera homblei* (exotic) **E** *Tripogon major* (rare and endemic) **F** *Aloe elgonica* (Endemic to Mt Elgon).

## Growth habit

The plant life forms of Mt Elgon were categorized as either trees, shrubs, climbers, lianas, or herbs. Herbs constituted the highest percentage of forest cover (72%) of the total species recorded, which consisted largely of terrestrial plants, few aquatic (9 species) and epiphytic (45 species) plants. The other growth habits constituted shrubs (13% with 228 species), climbers (6% with 118 species), trees (6% with 108 species), and lianas (2% having 24 species) (Fig. 3).

## Endemism and conservation status

The conservation status of the plants of Mt Elgon are recorded according to the IUCN Red list of Threatened species (IUCN 2021). A large proportion of the species have not been evaluated adding up to 1345 species (Fig. 4). A total of 340 species were of Least Concern (LC), 2 Near Threatened (NT), 9 Vulnerable (VU), 4 Endangered (EN) and 2 Critically Endangered (CR) (Fig. 4, Table 3). *Bothriocline auriculata* is the only critically endangered species native to the Ugandan side of Mt Elgon, known from 7 collections in 5 localities and has a decreasing population (IUCN 2021). The only exotic species recorded in Mt Elgon that is threatened (Critically Endangered with a decreasing population) in its native range (a limited distribution range in Northern Central and Eastern Central America) is *Fraxinus quadrangulata* (Wallander 2008; IUCN 2021).

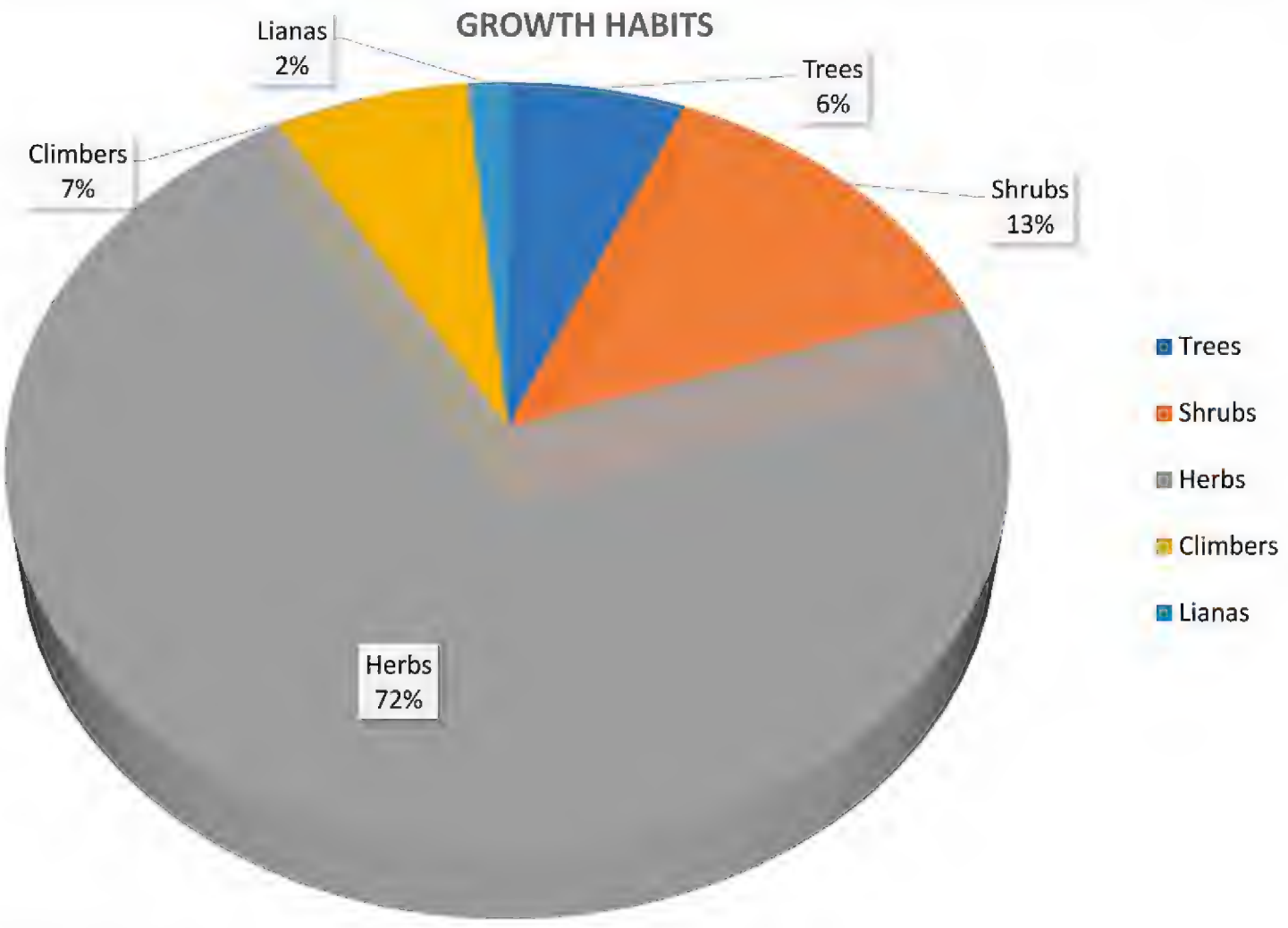


**Figure 3.** Different growth forms of the vascular plants of Mt Elgon.

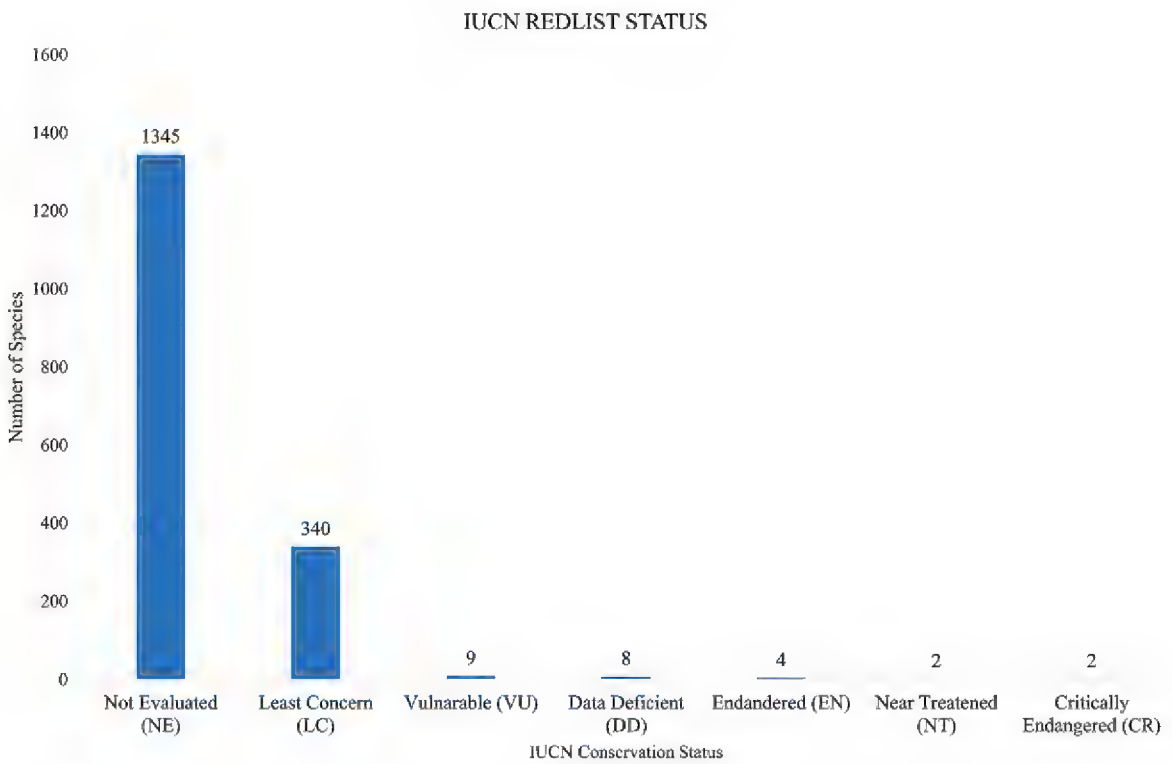


**Figure 4.** Number of species in each IUCN Red List category conservation status of vascular plants of Mt Elgon.

**Table 3.** List of threatened plants species found in Mt Elgon, IUCN Red list category and population trends.

| Family | Species | Habit | IUCN status | Population trend | Version |
|---|---|---|---|---|---|
| Acanthaceae | *Dicliptera nilotica* C.B.Clarke | Herb | VU | Decreasing | 3.1 |
| Asteraceae | *Bothriocline auriculata* (M.Taylor) C.Jeffrey | Herb or shrub | CR | Decreasing | 3.1 |
| Oleaceae | *Fraxinus quadrangulata* Michx. | Tree | CR | Decreasing | 3.1 |
| Asteraceae | *Helichrysum ellipticifolium* Moeser | Shrub | VU | Unknown | 3.1 |
| Fabaceae | *Galega lindblomii* (Harms) J.B.Gillett | Herb | EN | Unknown | 3.1 |
| Cyperaceae | *Carex monostachya* A.Rich. | Herb | VU | Unknown | 3.1 |
| Araliaceae | *Polyscias kikuyuensis* Summerh. | Tree | NT | Unknown | 3.1 |
| Fabaceae | *Angylocalyx braunii* Harms | Tree | VU | Unspecified | 3.1 |
| Hydrocharitaceae | *Lagarosiphon hydrilloides* Rendle | Aquatic herb | EN | Unknown | 3.1 |
| Meliaceae | *Entandrophragma angolense* C.CD. | Tree | NT | Threatened | 3.1 |
| Orchidaceae | *Platanthera micrantha* Schltr. | Herb | EN | Decreasing | 3.1 |
| Orchidaceae | *Ansellia africana* Lindl. | Herb | VU | Decreasing | 3.1 |
| Orchidaceae | *Angraecopsis tenerrima* Kraenzl. | Epiphytic herb | EN | Decreasing | 3.1 |
| Poaceae | *Colpodium hedbergii* (Melderis) Tzvelev | Herb | VU | Unknown | 3.1 |
| Poaceae | *Deschampsia angusta* Stapf & C.E.Hubb. | Herb | VU | Unknown | 3.1 |
| Polypodiaceae | *Arachniodes webbiana* (A.Braun) Schelpe | Herb | VU | Stable | 3.1 |
| Rosaceae | *Prunus africana* (Hook.f.) Kalkman | Tree | VU | Decreasing | 3.1 |

A total of 143 species recorded were found to be rare, endemic, or both. They comprised 103 endemic species in 35 families, 32 rare species in 22 families, and 14 that were both rare and endemic belonging to seven families. The families with a high number of endemic species include Asteraceae (22) and Cyperaceae (7) (Fig. 5), while species-rich families of rare species were Asteraceae (3) and Orobanchaceae (3) (Fig. 6). Asteraceae (4) and Poaceae (3) constituted the highest number of both rare and endemic species (Fig. 7).

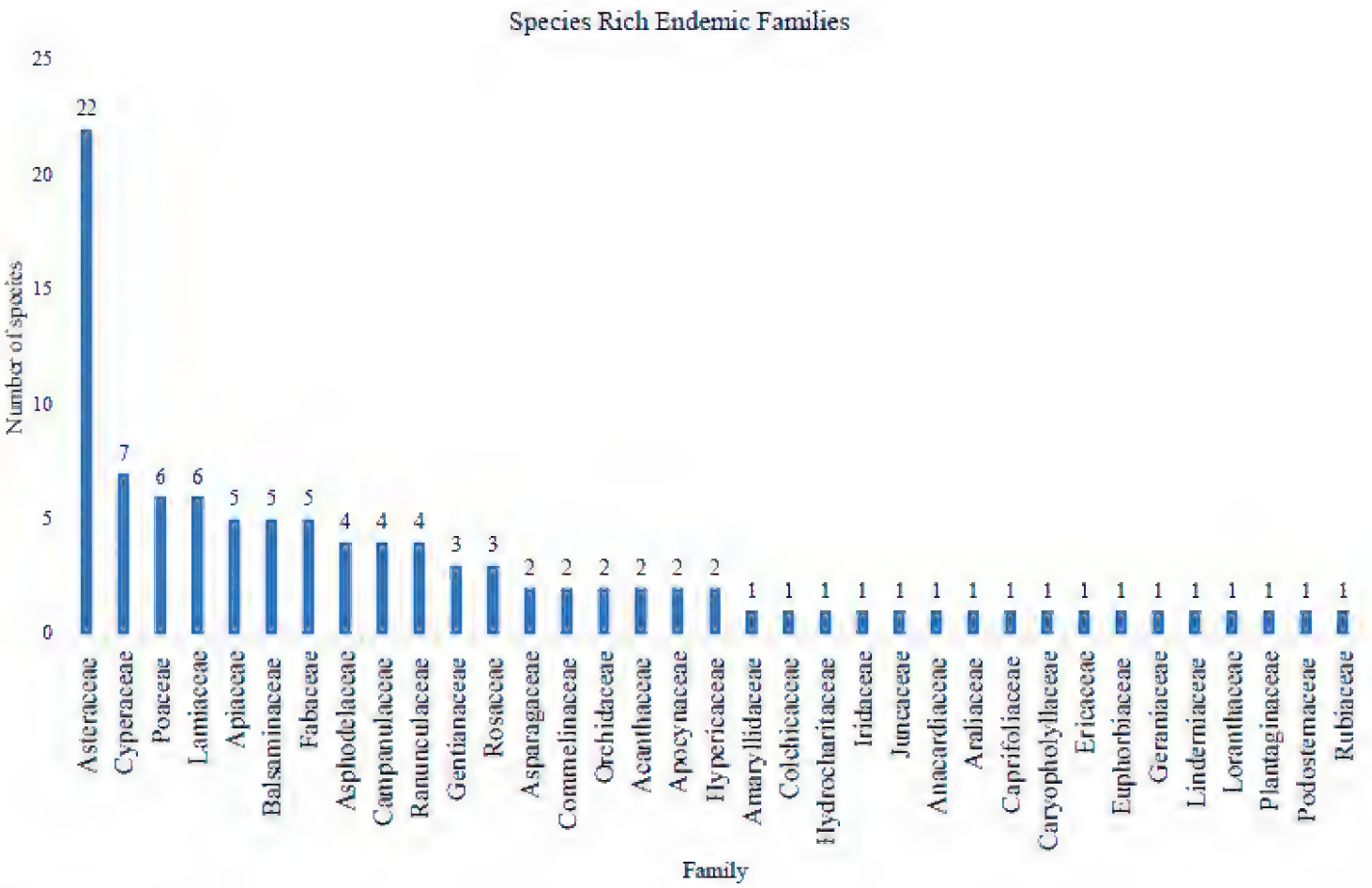


**Figure 5.** Families with high number of endemic species from Mt Elgon vascular plants.

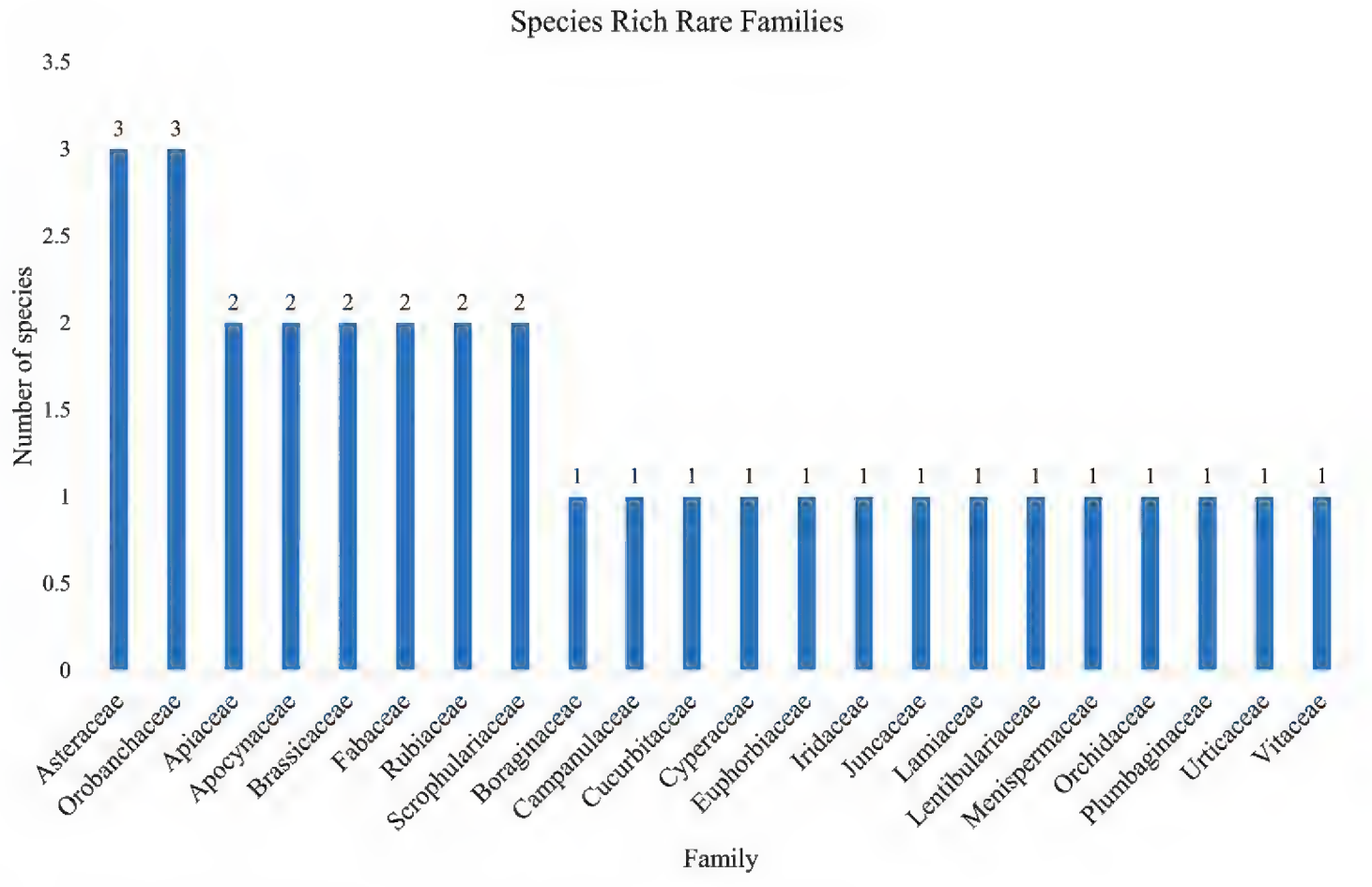


**Figure 6.** Families with high number of rare species from Mt Elgon.

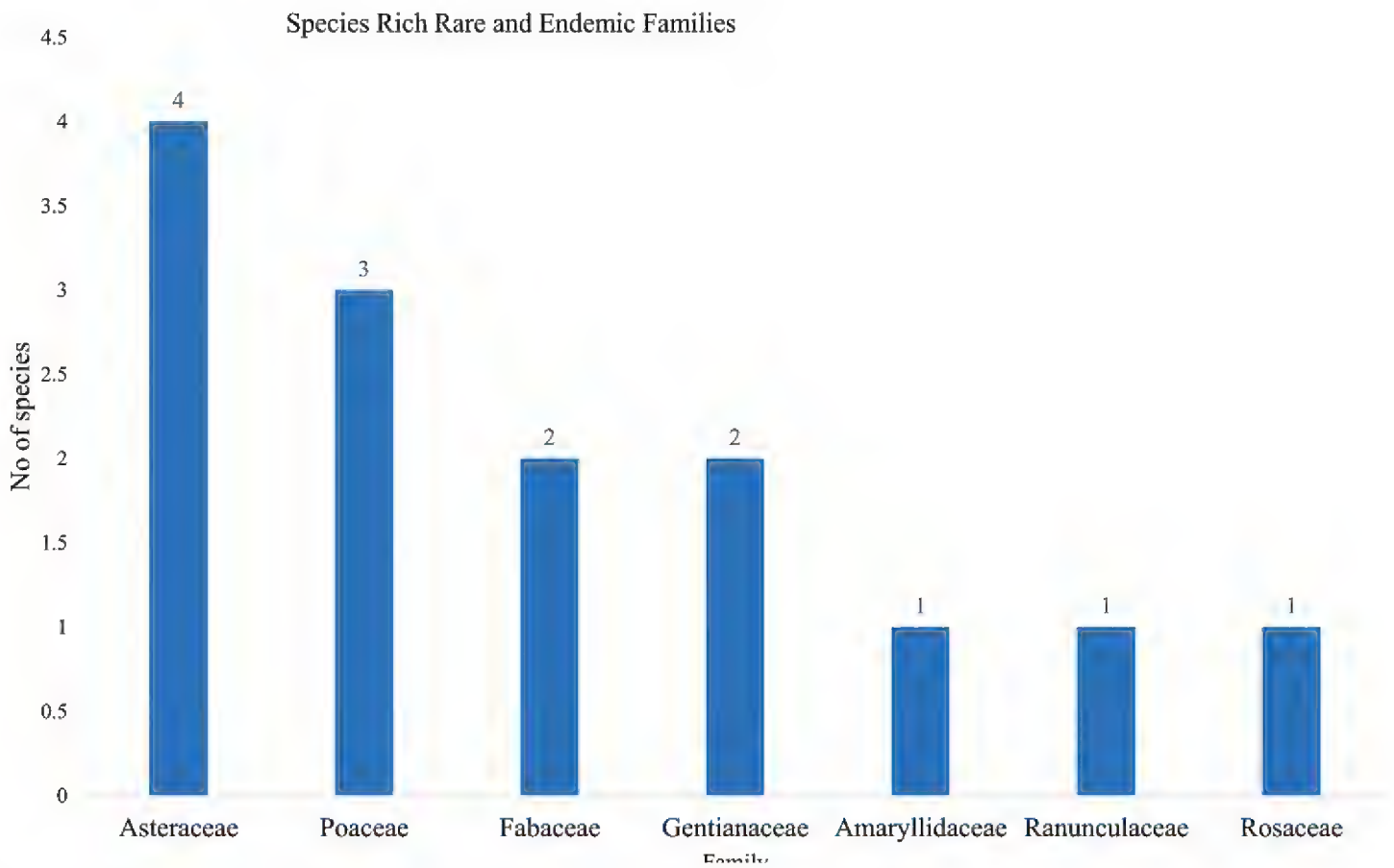


**Figure 7.** Families with high number of rare and endemic species from Mt Elgon.

## Residence status

Species of Mt Elgon were categorized according to their natural place of origin. All introduced cultivated or naturalized species were termed as exotic according to the Plants of the World Online (POWO 2022) (https://powo.science.kew.org). In Mt Elgon, a total of 144 species from 49 families were determined as exotic (Table 4). This represents 8.4% of the total species richness observed in Mt Elgon from this study. Asteraceae (38), Fabaceae (11), Solanaceae (9), Orchidaceae (6), Lamiaceae (5), and Euphorbiaceae (5) constituted the highest number of exotic species (Fig. 8). Being a transboundary mountain, 127 species were exclusively native to Kenya, while 29 species were only native to Uganda. However, since the mountain has no other physical or geographical barrier, exclusively native species were considered native to Mt Elgon.

## Discussion

Mt Elgon forms a significant ecosystem to both Kenya and Uganda for its ability to sustain both high numbers of plants as reported in this study, as well as supporting a large number of human populations (Russell et al. 2017). It is known to be among the oldest mountains in East Africa and hence serve as the potential origin from where some species emanated and dispersed to their current distribution

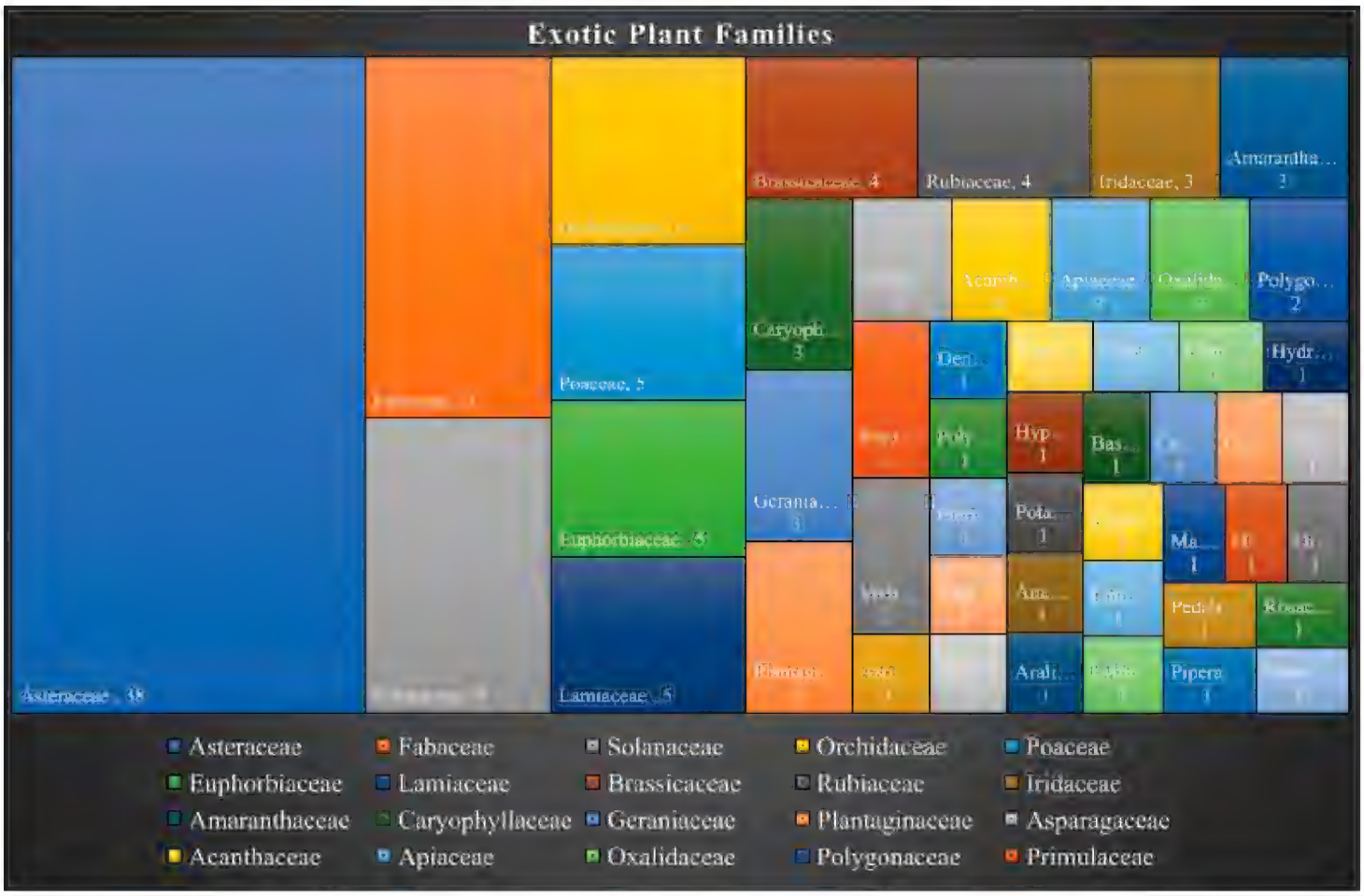


**Figure 8.** Families with highest number of exotic species of the vascular plants of Mt Elgon.

ranges (Tweedie 1976). Besides the scarcity of recent floristic studies in this mountain, it is among the hotspot regions of Africa for scientific studies on flora, fauna, and archeological studies (Bower 1974; CEPF 2012). This is evidenced by the high number of species recorded in this study, as well as the similarity of its species to different floristic regions of both close and distant proximity (Mbuni et al. 2019). Out of more than 12,000 species recorded in the flora of Tropical Africa, Mt Elgon hosts about 1709 species representing 14.24% of the Tropical African flora (FTEA editors 1952–2012). The number is expected to fluctuate and to either increase due to the discovery of new species, or reduce as a result of forest degradation and human encroachment. This could only be properly monitored based on field observations.

This study reports high species richness as compared to the previously available checklists (Bullock 1933; Tweedie 1976) whose work remain paramount to the current knowledge of Mt Egon. In this study, the highest species-rich family was Asteraceae, which is consistent with other floristic studies of East Africa (Mbuni et al. 2019; Kipkoech et al 2020; Melly et al. 2020; Watuma et al. 2022). Other common high species families, though not in the same sequence of richness, include Poaceae, Orchidaceae, Lamiaceae, and Cyperaceae. Interestingly, the family Asteraceae also constitutes the highest number of rare and endemic species of Mt Elgon. This calls for higher conservation of threatened species and species in the family Asteraceae among tropical montane forest, due to their potential high phylogenetic diversity, which increases the ability of the associated community to adapt to environmental stress and climate change (Chaves et al. 2021).

**Table 4.** List of exotic species and their growth habits recorded from Mt Elgon.

| Family | Species | Habit | Status |
|---|---|---|---|
| Acanthaceae | *Justicia insularis* T.Anderson | Herb | Exotic |
| Acanthaceae | *Dicliptera colorata* C.B.Clarke | Herb | Exotic |
| Anacardiaceae | *Searsia natalensis* (Bernh. ex Krauss) F.A.Barkley | Shrub or tree | Exotic |
| Apiaceae | *Torilis arvensis* (Huds.) Link | Herb | Exotic |
| Apiaceae | *Ammi majus* L. | Herb | Exotic |
| Araliaceae | *Hydrocotyle ranunculoides* L.f. | Herb | Exotic |
| Asteraceae | *Achillea millefolium* L. | Herb | Exotic |
| Asteraceae | *Adenostemma caffrum* DC. | Herb | Exotic |
| Asteraceae | *Chrysanthellum americanum* (L.) Vatke | Herb | Exotic |
| Asteraceae | *Sonchus oleraceus* L. | Herb | Exotic |
| Asteraceae | *Sonchus asper* (L.) Hill | Herb | Exotic |
| Asteraceae | *Ethulia conyzoides* L. | Herb | Exotic |
| Asteraceae | *Gutenbergia cordifolia* var. *marginata* (O.Hoffm.) C Jeffrey | Herb | Exotic |
| Asteraceae | *Baccharoides calvoana* subsp. *leucocalyx* (O.Hoffm.) Isawumi, El-Ghazaly & B.Nord. | Shrub, woody herb, rarely tree | Exotic |
| Asteraceae | *Vernonia schweinfurthii* Oliv. & Hiern | Herb | Exotic |
| Asteraceae | *Gnaphalium declinatum* L.f. | Herb | Exotic |
| Asteraceae | *Gamochaeta purpurea* (L.) Cabrera | Herb | Exotic |
| Asteraceae | *Helichrysum luteoalbum* (L.) Rchb. | Herb | Exotic |
| Asteraceae | *Helichrysum panduratum* O.Hoffm. ex De Wild. & T. Durand | Shrub | Exotic |
| Asteraceae | *Helichrysum setosum* Harv. | Herb | Exotic |
| Asteraceae | *Helichrysum stenopterum* DC. | Herb | Exotic |
| Asteraceae | *Eschenbachia stricta* (Willd.) Raizada | Herb | Exotic |
| Asteraceae | *Cotula australis* Hook.f. | Herb | Exotic |
| Asteraceae | *Artemisia afra* Jacq. | Shrub | Exotic |
| Asteraceae | *Cineraria deltoidea* Sond. | Herb | Exotic |
| Asteraceae | *Cirsium vulgare* (Savi) Ten. | Robust herb | Introduced |
| Asteraceae | *Emilia sonchifolia* (L.) DC. | Herb | Exotic |
| Asteraceae | *Emilia integrifolia* Baker | Herb | Exotic |
| Asteraceae | *Crassocephalum picridifolium* S.Moore | Herb | Exotic |
| Asteraceae | *Crassocephalum crepidioides* (Benth.) S.Moore | Herb | Exotic |
| Asteraceae | *Mikaniopsis clematoides* (Sch Bip. ex A Rich.) Milne-Redh. | Subshrub | Exotic |
| Asteraceae | *Dendrosenecio johnstonii* (H.H.Johnst.) B.Nord. | Tree or shrub | Exotic |
| Asteraceae | *Solanecio angulatus* (Vahl) C.Jeffrey | succulent herb | Exotic |
| Asteraceae | *Solanecio mannii* (Hook.F.) C.Jeffrey | Shrub or small tree | Exotic |
| Asteraceae | *Spilanthes mauritiana* (A.Rich ex Pers.) DC. | Herb | Exotic |
| Asteraceae | *Acmella caulirhiza* Delile | Herb | Exotic |
| Asteraceae | *Galinsoga parviflora* Cav. | Herb | Exotic |
| Asteraceae | *Galinsoga quadriradiata* Ruiz & Pav. | Herb | Exotic |
| Asteraceae | *Bidens flagellata* (Sherff) Mesfin | Herb | Exotic |
| Asteraceae | *Bidens pilosa* L. | Herb | Exotic |
| Asteraceae | *Chromolaena corymbosa* (Aubl.) R.M.King & H Rob. | Herb | Exotic |
| Asteraceae | *Ageratina adenophora* (Spreng.) R.M.King & H Rob. | Herb or shrub | Exotic |
| Asteraceae | *Mikania cordata* (Burm.f.) B.L.Rob. | Shrub or subshrub | Exotic |
| Campanulaceae | *Lobelia heyneana* Roem. & Schult. | Herb | Exotic |
| Caryophyllaceae | *Corrigiola litoralis* L. | Herb | Exotic |
| Euphorbiaceae | *Euphorbia prostrata* Aiton | Herb | Exotic |

| Family | Species | Habit | Status |
|---|---|---|---|
| Euphorbiaceae | *Euphorbia murielii* N.E.Br. | Tree | Exotic |
| Euphorbiaceae | *Euphorbia rubella* Pax | Herb | Exotic |
| Fabaceae | *Vachellia sieberiana* var. *woodii* (Burtt Davy) Kyal. & Boatwr. | Tree or shrub | Exotic |
| Fabaceae | *Indigofera homblei* Baker f. & Martin | Shrub | Exotic |
| Fabaceae | *Indigofera emarginella* Steud. ex A.Rich. | Shrub | Exotic |
| Fabaceae | *Indigofera schlechteri* Baker f. | Woody herb or shrub | Exotic |
| Fabaceae | *Macrotyloma axillare* var. *glabrum* (E.Mey.) Verdc. | Climbing or trailing herb | Exotic |
| Fabaceae | *Rhynchosia minima* var. *prostrata* (Harv.) Meikle | Climbing herb | Exotic |
| Fabaceae | *Vicia eriocarpa* (Hausskn.) Halácsy | Herb | Exotic |
| Fabaceae | *Vicia villosa* Roth | Herb | Exotic |
| Geraniaceae | *Geranium mascatense* Boiss. | Herb | Exotic |
| Geraniaceae | *Geranium bequaertii* De Wild. | Herb | Exotic |
| Geraniaceae | *Pelargonium alchemilloides* (L.) L'Hér. | Herb | Exotic |
| Hypericaceae | *Hypericum lanceolatum* Lam. | Shrub or tree | Exotic |
| Lamiaceae | *Leucas tettensis* Vatke | Herb | Exotic |
| Lamiaceae | *Orthosiphon rubicundus* Benth. | Herb | Exotic |
| Lamiaceae | *Aeollanthus pubescens* Benth. | Herb | Exotic |
| Linderniaceae | *Bonnaya ciliata* Spreng. | Herb | Exotic |
| Lythraceae | *Ammannia aegyptiaca* Willd. | Herb | Exotic |
| Oleaceae | *Fraxinus quadrangulata* Michx. | Tree | Exotic |
| Orobanchaceae | *Sopubia trifida* Buch.-Ham. ex D.Don | Herb | Exotic |
| Plantaginaceae | *Callitriche stagnalis* Scop. | Herb | Exotic |
| Plantaginaceae | *Veronica calycina* R.Br. | Herb | Exotic |
| Podocarpaceae | *Afrocarpus falcatus* (Thunb.) C.N.Page | Tree | Exotic |
| Polygonaceae | *Persicaria pulchra* Soják | Herb | Exotic |
| Primulaceae | *Lysimachia tenella* L. | Herb | Exotic |
| Rubiaceae | *Pentas Lanceolata* subsp. *quartiniana* (A.Rich) Verdc | Herb or subshrub | Exotic |
| Rubiaceae | *Galium tanganyikense* Ehrend. & Verdc. | Herb | Exotic |
| Rubiaceae | *Galium aparine* L. | Herb | Exotic |
| Solanaceae | *Datura stramonium* L. | Herb | Exotic |
| Solanaceae | *Physalis peruviana* L. | Herb | Exotic |
| Solanaceae | *Solanum pseudospinosum* C.H.Wright | Herb | Exotic |
| Solanaceae | *Solanum capsicoides* All. | Herb or shrub | Exotic |
| Solanaceae | *Solanum dasyphyllum* Schumach. & Thonn. | Herb | Exotic |
| Solanaceae | *Solanum nigrum* L. | Herb | Exotic |
| Verbenaceae | *Lantana trifolia* L. | shrub or subshrubby Herb | Exotic |
| Vitaceae | *Cyphostemma junceum* subsp. *jatrophoides* (Baker) Verdc. | Herb | Exotic |
| Amaryllidaceae | *Crinum zeylanicum* (L.) L. | Herb | Exotic |
| Asparagaceae | *Asparagus asiaticus* L. | Climber or shrub | Exotic |
| Asparagaceae | *Ornithogalum gussonei* Ten. | Herb | Exotic |
| Colchicaceae | *Androcymbium melanthioides* Willd. | Herb | Exotic |
| Commelinaceae | *Commelina africana* var. *krebsiana* (Kunth) C.B.Clarke | Herb | Exotic |
| Hydrocharitaceae | *Najas pectinata* Magnus | Herb | Exotic |
| Hypoxidaceae | *Hypoxis villosa* L.f. | Herb | Exotic |
| Iridaceae | *Moraea carsonii* Baker | Herb | Exotic |
| Iridaceae | *Moraea vegeta* L. | Herb | Exotic |
| Iridaceae | *Dierama pendulum* Baker | Herb | Exotic |
| Orchidaceae | *Arachnis flos-aeris* (L.) Rchb.f. | Herb | Exotic |
| Orchidaceae | *Platanthera micrantha* (Hochst. ex Seub.) Schltr. | Herb | Exotic |

| Family | Species | Habit | Status |
|---|---|---|---|
| Orchidaceae | *Epidendrum ibaguense* Kunth | Herb | Exotic |
| Orchidaceae | *Satyrium neglectum* subsp. *woodii* (Schltr.) A.V.Hall | Herb | Exotic |
| Orchidaceae | *Bulbophyllum josephi* var. *mahonii* (Rolfe) J.J.Verm. | Herb | Exotic |
| Orchidaceae | *Angraecopsis tenerrima* Kraenzl. | Herb | Exotic |
| Poaceae | *Stipa dregeana* Steud. | Herb | Exotic |
| Poaceae | *Festuca camusiana* St.-Yves | Herb | Exotic |
| Poaceae | *Eleusine coracana* Gaertn. | Herb | Exotic |
| Potamogetonaceae | *Potamogeton nodosus* Poir. | Herb | Exotic |
| Aspleniaceae | *Asplenium thunbergii* Kunze | Herb | Exotic |
| Dennstaedtiaceae | *Pteridium aquilinum* (L.) Kuhn | Herb | Exotic |
| Polypodiaceae | *Polystichum sinense* (Christ) Christ | Herb | Exotic |
| Pteridaceae | *Doryopteris concolor* (Langsd. & Fisch.) Kuhn | Herb | Exotic |
| Thelypteridaceae | *Thelypteris pozoi* (Lag.) Morton | Herb | Exotic |
| Euphorbiaceae | *Ricinus communis* L. | Herb or subshrub | Doubtful for Kenya (Exotic) |
| Asteraceae | *Tagetes minuta* L. | Herb | Introduced to Kenya (Exotic) |
| Amaranthaceae | *Amaranthus hybridus* L. | Herb | Introduced (Exotic) |
| Basellaceae | *Basella alba* L. | Herb or shrub | Introduced (Exotic) |
| Brassicaceae | *Mummenhoffia alliacea* (L.) Esmailbegi & Al-Shehbaz | Herb | Introduced (Exotic) |
| Brassicaceae | *Capsella bursa-pastoris* (L.) Medik. | Herb | Introduced (Exotic) |
| Caryophyllaceae | *Silene gallica* L. | Herb | Introduced (Exotic) |
| Euphorbiaceae | *Euphorbia hirta* L. | Herb | Introduced (Exotic) |
| Fabaceae | *Biancaea decapetala* (Roth) O.Deg. | Shrub | Introduced (Exotic) |
| Fabaceae | *Senna bicapsularis* (L) Roxb. | Shrub or tree | Introduced (Exotic) |
| Malvaceae | *Malva verticillata* L. | Herb | Introduced (Exotic) |
| Oxalidaceae | *Oxalis corniculata* L. | Herb | Introduced (Exotic) |
| Oxalidaceae | *Oxalis latifolia* Kunth | Herb | Introduced (Exotic) |
| Pedaliaceae | *Sesamum indicum* L. | Herb | Introduced (Exotic) |
| Rubiaceae | *Spermacoce pusilla* Wall. | Herb | Introduced (Exotic) |
| Solanaceae | *Solanum wendlandii* Hook.f. | Climber and liana | Introduced (Exotic) |
| Solanaceae | *Solanum mauritianum* Scop. | Shrub or small tree | Introduced (Exotic) |
| Solanaceae | *Solanum aculeatissimum* Jacq. | Herb or Shrub | Introduced (Exotic) |
| Poaceae | *Cynodon transvaalensis* Burtt Davy | Herb | Introduced (Exotic) |
| Piperaceae | *Piper umbellatum* L. | shrub or woody herb | Introduced and Naturalised (Exotic) |
| Fabaceae | *Vigna hosei* (Craib) Backer | Herb | Introduced to Kenya (Exotic) |
| Amaranthaceae | *Chenopodiastrum murale* (L.) S.Fuentes, Uotila & Borsch | Herb | Introduced to Kenya (Exotic) |
| Amaranthaceae | *Chenopodium album* L. | Herb | Introduced to Kenya (Exotic) |
| Brassicaceae | *Brassica juncea* (L.) Czern | Herb | Introduced to Kenya (Exotic) |
| Brassicaceae | *Brassica napus* L. | Herb | Introduced to Kenya (Exotic) |
| Cucurbitaceae | *Sicyos polyacanthos* Cogn. | Climber | Introduced to Kenya (Exotic) |
| Lamiaceae | *Coleus rotundifolius* (Poir.) A. Chev. & Perrot | Herb | Introduced to Kenya (Exotic) |
| Plantaginaceae | *Plantago lanceolata* L. | Herb | Introduced to Kenya (Exotic) |
| Polygonaceae | *Fallopia convolvulus* (L.) Á.Löve | climbing herb | Introduced to Kenya (Exotic) |

| Family | Species | Habit | Status |
|---|---|---|---|
| Primulaceae | *Lysimachia arvensis* (L.) U.Manns & Anderb. | Herb | Introduced to Kenya (Exotic) |
| Rosaceae | *Rubus niveus* Thunb. | Shrub | Introduced to Kenya (Exotic) |
| Verbenaceae | *Verbena brasiliensis* Vell. | Herb | Introduced to Kenya (Exotic) |
| Asteraceae | *Erigeron bonariensis* L. | Herb | Introduced to Kenya (Exotic)) |
| Poaceae | *Briza maxima* L. | Herb | Introduced to Kenya (Exotic)) |
| Lamiaceae | *Salvia coccinea* Buc'hoz ex Etl. | Herb | Naturalised-introduced (Exotic) |
| Caryophyllaceae | *Stellaria media* (L.) Vill. | Herb | Naturalized-introduced (Exotic) |

Compared to resent floristic studies in East Africa, Mt Elgon accounts for the highest species richness in the region (Zhou et al. 2018; Mbuni et al. 2019; Kipkoech et al. 2020; Melly et al. 2020; Watuma et al. 2022). This could be as a result of its strategic position among Afromontane regions, being an intersection of several floristic regions, its old age and isolation from other high tropical montane forests (CEPF 2012). However, compared to other highland forests, the increasing encroachment and anthropogenic activities in and around the mountain pose higher threats to the mountain ecosystem (Sassen et al. 2013; Masayi et al. 2021). Similarly, the presence of many exotic species poses threats to the native species in terms of competition for resources. Exotic species may thrive better than native species and become invasive due to their ability to adapt to new habitats, as well as adjusting to the impact of climate change, causing partial or total displacement of native species (Michelan et al. 2010). For instance, *Solanum incanum* also known as bush encroacher, *Solanum mauritiaum* and *Lantana camara*, have been recorded in Mt Elgon among the exotic species and are known to be among the 100 most noxious invasive species in East Africa (Lusweti et al. 2011). Furthermore, the native species are preferred for charcoal burning, timber and wood harvesting, as well as for medicinal purposes, and are thus rendered susceptible to depletion. Therefore, there is a need to strengthen conservation strategies, especially since human settlements are evident up to the moorland zone on the forest reserve (Ongugo et al. 2002).

Though there are evident efforts of forest regeneration through massive plantation and forest intrusion mitigation policies (Roga 2017), it is essential that the governments of both Kenya and Uganda join efforts to enforce planting native and indigenous trees, shrubs and herbs. This will, in turn, overcome the impending forest structure transformation and improve the capacity of Mt Elgon to sustain its ecosystem (flora and fauna), which forms the basis of livelihood to the surrounding population (Russell et al. 2017). Furthermore, it will secure springs of water that serve as sources of all permanent rivers, including the longest river in Africa, the Nile River.

## Conclusion

Conservation efforts of Mt Elgon have been in progress for many decades. This is because it forms a significant ecosystem of the East African mountains due to its unique flora shaped by its old age and isolation from other high tropical montane forests. This study provides a comprehensive list of plant species occurring on Mt Elgon and outlines characteristic species associated with this ecosystem that need priority conservation. It reports rare and endemic species, as well as the conservation status of evaluated species according to the IUCN. The existence of a high number of exotic species, which may alter the structure and species composition of the ecosystem, is of concern to Mt Elgon and needs further studies. The present study therefore builds on the foundation laid in previous studies and broadens the scope of possible ecological and phylogenetic studies in this region. Amid the biodiversity crisis, there is an urgent need for enhanced conservation of Mt Elgon's natural resources in order to preserve the extant species and the landscape features associated with its evolutionary formation and diversification.

## Checklist

The annotated checklist of plants of Mt Elgon records species in Kenya and Uganda for the benefit for scientific exploration of its flora, as well as broader research on conservation. The checklist is arranged alphabetically at family, genus, and species level. The plants are grouped into five classes: (i) Lycopodiopsida; (ii) Polypodiopsida; (iii) Pinopsida; (iv) Liliopsida; and (v) Magnoliopsida. The native range of the species are recorded for the benefit of biodiversity studies. The Pteridophyte Phylogeny Group I (PPG I) (2016) was used as the basis of classification of Lycopodiopsida and Polypodiosida; Christenhusz et al. (2011) for Pinopsida; and APG IV (2016) for the classification of Magnoliopsida and Liliopsida. For each species, information on growth habit, habitat, collection vouchers, altitudinal occurrence range, and their native distribution ranges are provided. In the cases of unavailable vouchers, descriptive monographs were cited. Species endemic to Mt Elgon are indicated by (**) while those endemic to the region in which Mt Elgon is located are indicated by (*). Exotic species are also indicated in the checklist by ($^{EX}$).

### Part I Lycopodiopsida

**F1. ISOETACEAE**
1 Genus, 1 species

***Isoetes abyssinica*** **Chiov.** – Habit: Herb. Habitat: Seasonal rock outcrop, 1520–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to E Central & E Tropical Africa.

**F2. LYCOPODIACEAE**
2 Genera, 3 species

***Huperzia dacrydioides* (Baker) Pic.Serm.** – Habit: Herb. Habitat: Montane Forest, 1500–2800 m. Vouchers: Holm Å 47 (S). Native distribution range: Ethiopia to S Africa, Comoros.

***Huperzia saururus* (Lam.) Trevis.** – Habit: Herb. Habitat: Moorland, Ericaceous zone, 2550–4300 m. Vouchers: Åke Strid 3584 (S), Holm Å 46 (S), Hedberg O 1037 (S). Native distribution range: Ascension, St Helena, Cameroon to Ethiopia and S Africa, W Indian Ocean, Peru to Subantarctic Islands.

***Lycopodium clavatum* L.** – Habit: Herb. Habitat: Bamboo zone, roadside, montane forest, 2000–2800 m. Vouchers: Katende 1034 (K), Mwangangi OM 482 (WAG.). Native distribution range: Temperate Northern Hemisphere to Tropical Mountains.

**F3. SELAGINELLACEAE**
1 Genus, 3 species

***Selaginella caffrorum* (Milde) Hieron.** – Habit: Herb. Habitat: Rock crevices, 1450–2300 m. Voucher: Wood GHS 449 (EA). Native distribution range: Sudan to S Africa.

***Selaginella goudotiana* Spring** – Habit: Herb. Habitat: Moist forest, moist thickets, 1250–2450 m. Voucher: Brown EJ in EA 12492 (EA), Wesche K 391 (US). Native distribution range: Tropical Africa, SW Arabian Peninsula, Madagascar.

***Selaginella kraussiana* (Kunze) A.Braun** – Habit: Herb. Habitat: Moist forest floor, bamboo zone, 1300–3100 m. Vouchers: Wesche K 505 (US), Rono et al. SAJIT-PR 0271 (EA, HIB). Native distribution range: Macaronesia, Tropical & S Africa.

## Part 2 Polypodiopsida

**F4. ASPLENIACEAE**
1 Genus, 29 species

***Asplenium abyssinicum* Fée** – Habit: Herb. Habitat: Bamboo zones, montane forest, 1850–3600 m. Vouchers: Katende T; Sheil D 2239 (K), Wood GHS 178 (MO), Hedberg O 151 (S). Native distribution range: Tropical Africa.

***Asplenium actiniopteroides* Peter** – Habit: Herb. Habitat: Moorland, 2500–4250 m. Voucher: Wesche K 853 (US), 107 (EA), 1078 (US), Åke Strid 3561 (S), Hedberg O 954 (S), Molesworth-Allen BEG 3672 (S). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Asplenium adamsii* Alston** – Habit: Herb. Habitat: Moorland, upper ericaceous zones, 2970–3400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon, Ethiopia to Tanzania.

***Asplenium adiantum-nigrum* L.** – Habit: Herb. Habitat: Roadsides, bamboo zones, heath scrub, ericaceous zone, moorland, 3000–3800 m. Voucher: Hedberg O 906 (EA). Native distribution range: Temperate Eurasia, Macaronesia, NW & S Africa to Tropical African Mountains, W Central America to N Mexico, Hawaiian Islands.

***Asplenium aethiopicum* (Burm.f.) Bech.** – Habit: Herb. Habitat: Moist bushland, moist forest, bamboo zone, rock crevices, moorland, 1430–3600 m. Vouchers: Charles E DeVol 5 (MICH), Bamps PRJ 6519 (BR), Sheil D; Katende T 836, 764 (K), Tiyoy LM 1242 (K), Wesche K 1412 (EA), 1271 (K), 897 (US), Wood C 173 (US), Beentje HJ 1932 (WAG). Native distribution range: Tropical & Subtropical Old World to Pacific.

***Asplenium anisophyllum* Kunze** – Habit: Herb. Habitat: Moist forest, 1000–1600 m. Vouchers: Hedberg O 89 (S), Holm Å 44 (S). Native distribution range: Tropical & S Africa.

***Asplenium auriculatum* Sw.** – Habit: Herb. Habitat: Moist forest, moorland, (2400–)2600–4200 m. Voucher: Synge PM 1033 (MO). Native distribution range: Tropical & Subtropical America.

***Asplenium boltonii* Hook. ex Schelpe** – Habit: Herb. Habitat: Bamboo zone, montane forest, 1600–2750 m. Vouchers: Wesche K 1272 (S), Granvik H 343 (S). Native distribution range: Tanzania to S Africa, Madagascar, Réunion.

***Asplenium buettneri* Hieron.** – Habit: Herb. Habitat: Riverine forest, 1450–1700 m. Voucher: Molesworth-Allen BEG 3673 (US). Native distribution range: Tropical Africa, Comoros, Madagascar.

***Asplenium bugoiense* Hieron.** – Habit: Herb. Habitat: Moist montane forest, bamboo forest, 2000–2700 m. Vouchers: Wesche K 579 (US), Molesworth-Allen BEG 3671 (US), Rono et al. SAJIT-PR 0199 (EA, HIB). Native distribution range: Ethiopia to Rwanda.

***Asplenium ceii* Pic.Serm.** – Habit: Herb. Habitat: Moist forest, 1700–2430 m. Voucher: Gardner 1028 (EA). Native distribution range: Gabon to Ethiopia and Mozambique.

***Asplenium christii* Hieron.** – Habit: Herb. Habitat: Moist Forest, 1450–1900 m. Voucher: Granvik H 361 (S). Native distribution range: Kenya to South Africa.

***Asplenium elliottii* C.H.Wright** – Habit: Herb. Habitat: Moist montane forest, bamboo forest, 1200–2650 m. Vouchers: Tweedie EM 1899 (S), Molesworth-Allen BEG 3670 (US). Native distribution range: Ethiopia, E Central & E Tropical Africa.

***Asplenium erectum* Bory ex Willd.** – Habit: Herb. Habitat: Moist forest, 1300–2750 m. Vouchers: Wesche K 690 (US), Hedberg O 90 (S). Native distribution range: Tropical & S Africa, W Indian Ocean, India, Sri Lanka, Jawa, Lesser Sunda Islands (Timor), Samoa (Savai'i).

***Asplenium friesiorum* C.Chr.** – Habit: Herb. Habitat: Riverine thickets, bamboo forest, moist forest, 2700–3000 m. Vouchers: Katende T; Sheil D 2258 (K), van Heist M 571 (K). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Asplenium gemmascens* Alston** – Habit: Herb. Habitat: Moist forest, 1100–1150 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: S Nigeria to Uganda and Angola.

***Asplenium gemmiferum* Schrad.** – Habit: Herb. Habitat: Forest, 1500–2300 m. Voucher: Holm Å 48 (S). Native distribution range: Bioko to Uganda and S Africa, Réunion, Mauritius.

***Asplenium hypomelas* Kuhn** – Habit: Herb. Habitat: Riverine, moist forest, rock outcrops, 1500–2400 m. Vouchers: Kisalye N; van Heist M 564 (K), Gerhard Lindblom 577 (S). Native distribution range: Tropical Africa to South Africa.

***Asplenium loxoscaphoides* Baker** – Habit: Herb. Habitat: Bamboo zone, moist forest, 3100–3650 m. Vouchers: Wesche K 1301 (US), Hedberg O 116 (S). Native distribution range: E Tropical Africa to Malawi.

***Asplenium lunulatum* Sw.** – Habit: Herb. Habitat: Forest, 2200–2500 m. Vouchers: Åke Strid 3174 (S, MO). Native distribution range: Bioko, Ascension, St Helena, Kenya to S Africa.

***Asplenium monanthes* L.** – Habit: Herb. Habitat: Bamboo zone, dry montane forest, 2100–3400 m. Vouchers: Beentje HJ 1954 (WAG), Brown EJ EA 12493 (U), Katende T; Sheil D 1144 (K), Wesche K 655 (K), Brown, EJ EA 12493 (U). Native distribution range: Macaronesia, Tristan da Cunha, Bioko, Cameroon, Somalia to S Africa, Madagascar, Réunion, Hawaiian Islands, Tropical & Subtropical America.

***Asplenium protensum* Schrad.** – Habit: Herb. Habitat: Moist forest, 1250–2900(–3300) m. Vouchers: Katende T; Sheil D 1073 (K), Wesche K 502 (US), Wood G 179 (US). Native distribution range: Tropical & S Africa, W Indian Ocean, N Yemen.

***Asplenium sandersonii* Hook.** – Habit: Herb. Habitat: Forest, rock outcrops, 2600–3100 m. Voucher: Wesche K 1339 (US). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Asplenium smedsii* Pic.Serm.** – Habit: Herb. Habitat: Bamboo zone, moist forest, 1500–3000 m. Voucher: Beentje 1958 (US), Wesche K 571 (US). Native distribution range: Ethiopia to Malawi, W Indian Ocean.

***Asplenium stuhlmannii* Hieron.** – Habit: Herb. Habitat: Grassland, riverine forest, 1200–2230 m. Vouchers: Faden RB & Evans AJ 69/718 (US). Native distribution range: W Tropical Africa to Sudan and Tanzania, Madagascar.

***Asplenium theciferum* (Kunth) Mett.** – Habit: Herb. Habitat: Moist, forest, bamboo zone, 850–2900 m. Voucher: Wesche K 898 (US). Native distribution range: S Mexico to Tropical America, Africa.

[EX]***Asplenium thunbergii* Kunze** – Habit: Herb. Habitat: Moorland, (2400–)2600–4200 m. Voucher: Wood 177 (MO). Native distribution range: Madagascar, Sri Lanka, Assam to New Guinea.

***Asplenium trichomanes* L.** – Habit: Herb. Habitat: Moist rocky forest, 2130–2700 m. Voucher: Wesche K 1648 (US). Native distribution range: Cosmopolitan.

***Asplenium uhligii* Hieron.** – Habit: Herb. Habitat: Moorland, forest, giant heath, woodland (2400–)2600–4200 m. Vouchers: Wood G 268 (K), Rose F 10,266 (K), 269 (K), Dummer RA 3331 (US). Native distribution range: Cameroon, Ethiopia to E Tropical Africa.

## F5. CYATHEACEAE

1 Genus, 1 species

***Alsophila camerooniana* (Hook.) R.M.Tryon** – Habit: Herb. Habitat: Afromontane mixed forest, by streams, 1500–2835 m. Vouchers: Kisalye N; van Heist M 535 (K). Native distribution range: W Tropical Africa to Angola.

## F6. DENNSTAEDTIACEAE

2 Genera, 2 species

***Hypolepis rugosula* subsp. *viscida* (Roxb.) Schwartsb. & J.Prado** – Habit: Herb. Habitat: Bamboo zone, moorland, forest, 2700–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: St Helena, Bioko, Cameroon to E Central & E Tropical Africa, Madagascar.

[EX]***Pteridium aquilinum* (L.) Kuhn** – Habit: Herb. Habitat: Forest, 300–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, N & NE Tropical Africa, Arabian Peninsula, Europe to Siberia and Iran.

## F7. HYMENOPHYLLACEAE

1 Genus, 1 species

***Trichomanes melanotrichum* Schltdl.** – Habit: Epiphytic or lithophytic herb. Habitat: Moist forest, on tree trunks, rocks, 1460–3050 m. Vouchers: Beentje HJ 1953 (WAG), Dummer RA 3703 (NMNH), 3699, 3703 (US). Native distribution range: Tropical & S Africa, Madagascar, Mauritius.

## F8. OPHIOGLOSSACEAE

1 Genus, 2 species

***Ophioglossum polyphyllum* A.Braun ex Seub.** – Habit: Herb. Habitat: Woodland, montane grassland, forests, 1100–1350 m. Voucher: Faden & Evans 71/472 (EA). Native distribution range: Tropical & Subtropical Old World, Arizona to Texas and Mexico.

***Ophioglossum reticulatum* L.** – Habit: Herb. Habitat: Grassland, moist woodland, forest margin, 0–2500 m. Vouchers: Tweedie 1881 (EA), Rono et al. SAJIT-PR 0057 (EA, HIB). Native distribution range: Tropics & Subtropics.

## F9. POLYPODIACEAE

11 Genera, 18 species

***Arachniodes webbiana* (A.Braun) Schelpe** – Habit: Herb. Habitat: Wet forest, streamside, 1300–2600 m. Vouchers: Hedberg O 151 (S), Beentje HJ 1986 (US). Native distribution range: Madeira, Kenya, Uganda, Rwanda, Malawi, Tanzania, Zimbabwe to South Africa.

***Arthropteris monocarpa* (Cordem.) C.Chr.** – Habit: Herb. Habitat: Moist montane forest, near streams, bamboo zone, 1250–2450 m. Vouchers: Snowden JD 797 (NHMUK), Schippers RR K 229 (WAG), Collector unknown 3679 (US). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Arthropteris orientalis* (Gmel.) Posth.** – Habit: Herb. Habitat: Moist thickets, 900–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa, W Indian Ocean, N Yemen.

***Dryopteris tricellularis* J.P.Roux** – Habit: Herb. Habitat: Montane forest, riverine, bamboo zone, 2075–3420 m. Vouchers: Wesche K 649 (US), 471 (US). Native distribution range: Kenya to Uganda

***Elaphoglossum angulatum* (Blume) T.Moore** – Habit: Herb. Habitat: Bamboo, ericaceous zone, 2470–2600 m. Voucher: Wesche K 1277 (K). Native distribution range: E Central & E Tropical Africa, Madagascar, Tropical & Subtropical Asia.

***Elaphoglossum aubertii* (Desv.) T.Moore** – Habit: epiphyte herb. Habitat: Montane forest, 1500–2600 m. Vouchers: Katende T; Sheil D 1075 (K), Dummer RA 3480 (K). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Elaphoglossum deckenii* (Kuhn) C.Chr.** – Habit: Herb. Habitat: Forest, bamboo to ericaceous zone, 2200–3300 m. Vouchers: Wesche K 1278 (K), Wood GHS 270 (K). Native distribution range: Ethiopia to S Tropical Africa, Comoros, Madagascar.

***Elaphoglossum hybridum* (Bory) T.Moore** – Habit: Herb. Habitat: Moist montane forest, moorland, 2000–3600 m. Voucher: Hedberg O 904 (K, S). Native distribution range: Cameroon to Ethiopia and S Africa, Comoros, Madagascar, Réunion, Mauritius.

***Elaphoglossum subcinnamomeum* Hieron.** – Habit: Herb. Habitat: Moorland, ericaceous zone, 3000–3600 m. Voucher: Hedberg O 993 (K). Native distribution range: Cameroon, Kenya to Tanzania.

***Lepisorus excavatus* (Bory ex Willd.) Ching** – Habit: Epiphytic herb. Habitat: Moist montane forest, 2378–3050 m. Vouchers: Wesche K 1276 (US), Schippers RR K 185 (WAG). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Loxogramme abyssinica* (Baker) M.G.Price** – Habit: Herb. Habitat: Dry, wet forest, 1000–2500 m. Vouchers: Kisalye N; van Heist M 499 (K), Wesche K 630 (US), Tiyoy L 1243 (K), Eggeling W 2456 (US), Granvik H 365 (S). Native distribution range: Tropical Africa, Comoros, Madagascar, N Yemen.

***Melpomene flabelliformis* (Poir.) A.R.Sm. & R.C.Moran** – Habit: Herb. Habitat: Forest, moorland, bamboo zone, 2230–3500 m. Voucher: Wesche K 1217 (US), Molesworth-Allen BEG 3668 (EA, US). Native distribution range: Mexico (Oaxaca, Chiapas) to Tropical America, Tropical & S Africa, W Indian Ocean.

***Nephrolepis biserrata* (Sw.) Schott** – Habit: Herb. Habitat: Moist upland forest, 1000–1500 m. Voucher: Chater-Jack 25 in CM 5848 (EA). Native distribution range: Tropics & Subtropics.

***Nephrolepis undulata* J.Sm.** – Habit: Herb. Habitat: Swamps, marshy grassland, bushland, forest, rocky cliffs, 750–2450 m. Voucher: Lugard 285 (EA). Native distribution range: Tropics & Subtropics.

***Pleopeltis macrocarpa* (Bory ex Willd.) Kaulf.** – Habit: Herb. Habitat: Moist forest, riverine forest, bamboo forest, moorland, 1099–3600 m. Vouchers: Tweedie 1820 (US), Wesche K 553 (US), Bamps PRJ 6491 (BR), Szczepanek K 278 (BR), Molesworth-Allen BEG 3681 (US). Native distribution range: Mexico to S Tropical America, Tropical Africa, Arabian Peninsula, S India, Sri Lanka.

***Polystichum magnificum* F.Ballard** – Habit: Herb. Habitat: Moorland, 3300–3750 m. Vouchers: Hedberg O 965 (K), Wesche K 1419 (US). Native distribution range: S Ethiopia to Tanzania.

EX ***Polystichum sinense* Christ** – Habit: Herb. Habitat: Moist montane forest, streamsidde, bamboo zone, moorland, 2400–3800 m. Vouchers: RB Faden 71/464 (K), Granvik H 361 (S). Native distribution range: S Africa, Pakistan to China, Taiwan.

***Polystichum transvaalense* N.C.Anthony** – Habit: Herb. Habitat: Moist forest, bamboo zone, 1500–2700 m. Vouchers: Tiyoy L 1241 (WAG, K). Native distribution range: Cameroon to Kenya and S Africa.

## F10. PTERIDACEAE

8 Genera, 12 species

***Actiniopteris semiflabellata* Pic.Serm.** – Habit: Herb. Habitat: Open bushland, woodland, 600–2100 m. Vouchers: Tweedie EM 1838 (K). Native distribution range: Africa to Nepal.

***Adiantum poiretii* Wikstr.** – Habit: Herb. Habitat: Montane forest, forest/bamboo boundary, 1625–3000 m. Vouchers: Schippers RR K 226 (WAG), Hedberg O 65 (K), Roscoe J sn (K), Brown EJ EA12489 (K), Tweedie 1883 (K), Tweedie 1883A (K), Wesche K 1360 (K). Native range: Tropical & Subtropical America, Nigeria to Ethiopia and S Africa, SW Arabian Peninsula, W Indian Ocean, SW India, Sri Lanka.

***Anogramma leptophylla* (L.) Link** – Habit: Herb. Habitat: Forest edges and slopes, moorland, 1500–3400 m. Vouchers: Lewin NH 304 (EA), Lye KA; Katende AB 6406 (K), Hamilton 6627 (MO), Irwin PH 304 (K), Snowden JD 512 (EA). Native distribution range: S Central Europe to Tropics & Subtropics.

***Coniogramme africana* Hieron.** – Habit: Herb. Habitat: Stream sides, waterfall spray zones, 2134–2900 m. Vouchers: Katende T; Sheil D 359 (K), Katende; Sheil 1869 (K). Native distribution range: Tropical Africa.

EX***Doryopteris concolor*** **(Langsd. & Fisch.) Kuhn** – Habit: Herb. Habitat: Forest, 1000–2300 m. Voucher: Tweedie 2435 (EA). Native distribution range: S Mexico to Tropical America.

***Haplopteris volkensii*** **(Hieron.) E.H.Crane** – Habit: Epiphytic herb. Habitat: Moist montane forest, 1750–2255 m. Voucher: Snowden JD 950 (K). Native distribution range: Ethiopia to S Tropical Africa.

***Hemionitis calomelanos*** **(Sw.) Christenh.** – Habit: Herb. Habitat: Roadsides, rock crevices, 1350–2700 m. Voucher: Hemp A 5419 (US). Native distribution range: NE Spain, Ethiopia to S Africa, W Indian Ocean, Pakistan to China (S Sichuan, Yunnan).

***Hemionitis farinosa*** **(Forssk.) Christenh.** – Habit: Herb. Habitat: Bamboo zone, moorland, 2150–3000 m. Vouchers: Lugard EJ 295 (K), Hedberg O 178 897(K), Wesche K 1048 (US), Granvik H 359 (S), Gardner HM 1035 (K). Native distribution range: Mexico to Venezuela and Peru, Africa to Arabian Peninsula.

***Hemionitis quadripinnata*** **(Forssk.) Christenh.** – Habit: Herb. Habitat: Roadside, banks, moist montane forests, bamboo zones, 1525–2890 m. Voucher: Sheil D; Katende T 775 (K), Wesche K 699 (US). Native distribution range: Tropical & S Africa, Comoros, Madagascar, Mauritius, N Yemen.

***Hemionitis viridis*** **(Forssk.) Christenh.** – Habit: Herb. Habitat: Rock outcrop, bushland, shady riverines, forested areas, 650–2250 m. Vouchers: Katende T; Sheil D 630 (K), Tweedie 1831 (EA). Native distribution range: Ethiopia to S Africa, W Indian Ocean, SW Arabian Peninsula.

***Pteris cretica*** **L.** – Habit: herb. Habitat: Montane forest, 1500–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Canary Islands (Gran Canaria), Ethiopia to S Africa, Réunion, Madagascar, St Helena, Ascension, Socotra, Yemen, Mediterranean to Japan and Tropical Asia.

***Pteris friesii*** **Hieron.in Fries** – Habit: Herb. Habitat: Forest, swamps, bamboo zones, 1000–3050 m. Voucher: Taylor G 3415 (NHMUK). Native distribution range: Tropical & S Africa.

## F11. THELYPTERIDACEAE

1 Genus, 5 species

***Thelypteris bergiana*** **(Schltdl.) Ching** – Habit: Herb. Habitat: By streams, rivers in moist montane forest, bamboo zones, 1800–2470 m. Voucher: Molesworth-Allen BEG 3680 (US). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Thelypteris dentata*** **E.P.St.John** – Habit: Herb. Habitat: Along streams, moist forest, 2100 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World to Pacific.

***Thelypteris oppositiformis*** **(C.Chr.in Bonap) Ching** – Habit: Herb. Habitat: By streams in Bamboo zone, ericaceous zone, montane forest, 1900–2950 m. Voucher: Wesche K 1302 (US). Native distribution range: Nigeria to Ethiopia and S Africa, Madagascar.

EX***Thelypteris pozoi*** **(Lag.) Morton** – Habit: Herb. Habitat: Bamboo zone, moist montane forest, ericaceous zone, 2050–3350 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Azores, Madeira, SW France to Spain.

***Thelypteris pulchra*** **(Bory ex Willd.) Schelpe** – Habit: Herb. Habitat: Riverine forest 1465–2135 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Ethiopia and Mpulamanga, W Indian Ocean.

## F12. WOODSIACEAE

2 Genera, 2 species

***Athyrium schimperi*** **Moug.; Fee** – Habit: Herb. Habitat: Montane forest edge, among rocks in montane grasslands, 1820–3050 m. Voucher: Tweedie 1882 (US). Native distribution range: Tropical & S Africa, Madagascar.

***Cystopteris fragilis*** **(L.) Bernh.** – Habit: Herb. Habitat: Bamboo zone, 1400–4300 m. Vouchers: Wesche K 1918 (US), Beentje HJ 1959 (WAG). Native distribution range: Cosmopolitan.

# Part 3 Pinopsida

## F13. CUPRESSACEAE

1 Genus, 1 species

***Juniperus procera*** **Hochst. ex Endl.** – Habit: Tree. Habitat: Drier upland forest, 1800–2950 m. Vouchers: Wesche K 2025 (K), Snowden JD 930 (BR), 844 (EA, MO), Styles BT 292 (K), Lugard EJ; Lugard C 408 (K), Bamps PRJ 6511 (WAG, MO), Thomas AS 2630 (MO, EA). Native distribution range: Eritrea to Zimbabwe, SW Arabian Peninsula.

## F14. PODOCARPACEAE

2 Genera, 3 species

EX***Afrocarpus falcatus*** **(Thunb.) C.N.Page** – Habit: Tree. Habitat: Forest, 1250–2700 m. Vouchers: EA. Native distribution range: Malawi to S Africa.

***Afrocarpus gracilior*** **(Pilg.) C.N.Page** – Habit: Tree. Habitat: Forest, 1500–2400 m. Vouchers: Vesey-Fitzgerald in C.M 18617 (EA), Eggeling 2474 (EA), Wesche K 2024 (K), Bamps PRJ 6496 (WAG), Hedberg O 320 (K), Mwangangi OM 429 (BR), Styles BT 269 (BR), Eggeling WJ 2479 (BR), 2474 (K). Native distribution range: Ethiopia to E Tropical Africa.

***Podocarpus milanjianus*** **Rendle** – Habit: Tree. Habitat: Upland forest, 1500–3350m. Vouchers: Wesche K 616 (K), Katende T; Sheil D 325 (K), Wood GHS 914 (K), Snowden JD 964 (EA, K, US), Dummer RA 3623 (US), Rono et al. SAJIT-PR 0229 (EA, HIB). Native distribution range: Nigeria to S Sudan and S Tropical Africa.

## Part 4 Liliopsida

### F15. ALISMATACEAE

1 Genus, 1 species

***Alisma plantago-aquatica* L.** – Habit: Herb. Habitat: Forest, streamside, 1450–2340 m. Vouchers: Tweedie 730 (EA). Native distribution range: Temperate Eurasia, North Africa to Tanzania

### F16. AMARYLLIDACEAE

4 Genera, 6 species

****Ammocharis angolensis* (Baker) Milne-Redh.** – Habit: Herb. Habitat: Outcrop rock, 1800–2600 m. Vouchers: Lugard 421 (EA), Snowden JD 1015 (K), 1055 (EA). Native distribution range: Uganda to Angola.

***Boophone disticha* Herb.** – Habit: Herb. Habitat: Rocky grassland, 1280–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: SE South Sudan to S Africa

***Crinum kirkii* Baker** – Habit: Herb. Habitat: Grassland, bushlands, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: E Tropical Africa to Mozambique.

***Crinum macowanii* Baker** – Habit: Herb. Habitat: Upland grasslands, 1630–2310 m. Voucher: Snowden JD 827 (EA). Native distribution range: Eritrea to S Africa, Seychelles.

[EX]***Crinum zeylanicum* (L.) L.** – Habit: Herb. Habitat: Grassland, riverine, old cultivations, 1000–1900 m. Voucher: Wahlstrom 3 (EA). Native distribution range: Seychelles, SW India, Sri Lanka.

***Scadoxus multiflorus* (Martyn) Raf.** – Habit: Herb. Habitat: Montane forest, grassland, 1750–2700 m. Vouchers: Snowden JD 846 (EA), Holm Å 20 (K). Native distribution range: Tropical & S Africa to SW Arabian Peninsula.

### F17. ARACEAE

3 Genera, 5 species

***Amorphophallus abyssinicus* (A.Rich.) N.E.Br.** – Habit: Herb. Habitat: Wooded grasslands, marshland, 1000–2300 m. Vouchers: Lugard 581, Tweedie 2591 (K). Native distribution range: Tropical & S Africa.

***Arisaema enneaphyllum* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Montane forest edges, bamboo zone, 2300–3000 m. Vouchers: Tweedie 1167 (K), Tweedie 1167B (2/3) (K), Tweedie EM 1167A (K), Osmaston 4010 (EA), Hedberg 1056 (EA), Rono et al. SAJIT-PR 0032 (EA, HIB). Native distribution range: Ethiopia to Uganda, Yemen.

***Arisaema mildbraedii* Engl.** – Habit: Herb. Habitat: Moist montane forest, bamboo zone, 1400–2620 m. Vouchers: EjJ & C Lugard (EA), Snowden JD 895 (EA), Rono et al. SAJIT-PR 0045, 0101 (EA, HIB). Native distribution range: E Central & E Tropical Africa.

***Arisaema schimperianum* Schott** – Habit: Herb. Habitat: Forest, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to E DR Congo.

***Sauromatum venosum* (Aiton) Kunth** – Habit: Herb. Habitat: Moist woodland, riverine forest, 230(1000)–2140 m. Vouchers: Chater-Jack 245 (K), Major EJ; Lugard C 580 (K), Anderson 2773 (K). Native distribution range: Upland areas of Africa and Asia

## F18. ASPARAGACEAE

10 Genera, 34 species

***Albuca abyssinica* Jacq.** – Habit: Herb. Habitat: Grassland, bushland, 0010–2500 m. Voucher: Polhill 399 (EA). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

***Albuca virens* (Lindl.) J.C.Manning & Goldblatt** – Habit: Herb. Habitat: Open woodland, seasonally wet grassland, 1750–3000 m. Vouchers: Tweedie 511 (K), Polhill, R 415 (K). Native distribution range: Eritrea to S Africa.

***Anthericum angustifolium* Hochst.** – Habit: Herb. Habitat: Grasses, seasonally waterlogged soils, 1800–2850 m. Vouchers: Naiga; Katende 700 (K), Symes 358 (K), Major EJ; Lugard C 592 (K), Irwin PH Mrs 69 (K), Tweedie 3449 (K), Chater-Jack 264 (K). Native distribution range: Eritrea to Kenya.

***Asparagus africanus* Lam.** – Habit: Erect or climbing woody shrub. Habitat: Forest, woody bushes, grassland, 100–3500 m. Vouchers: Dummer RA 3737 (EA). Native distribution range: Tropical & S Africa, Arabian Peninsula, W India.

[EX]***Asparagus asiaticus* L.** – Habit: Scrambling or woody climbing shrub. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: India.

***Asparagus asparagoides* (L.) Druce** – Habit: Climbing herb. Habitat: woodland, dry forest, forest margin, 1750–3000 m. Voucher: Wesche K 1311 (EA). Native distribution range: S Ethiopia to S Africa.

***Asparagus buchananii* Baker** – Habit: Scrambling or woody climbing shrub. Habitat: Grassland, wooded grassland, thickets, woodland, 150–2250 m. Voucher: Snowden JD 1064 (EA, WAG). Native distribution range: SW Ethiopia to S Africa.

***Asparagus flagellaris* Baker** – Habit: Shrub. Habitat: Forest, 500–1000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, W Arabian Peninsula.

***Asparagus racemosus* Willd.** – Habit: Scrambling or woody climbing shrub. Habitat: Forest margins, bushlands, 800–2900 m. Voucher: Snowden JD 1036 (EA). Native distribution range: Tropical Africa to N Australia.

***Bowiea volubilis* Harv. ex Hook.f. subsp. *volubilis*** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Uganda to S Africa.

***Bowiea volubilis* Harv. ex Hook.f.** – Habit: Herb. Habitat: Evergreen bushland, rocky woodland, 1680–2320 m. Vouchers: Rono et al. SAJIT-PR 0153 (EA, HIB). Native distribution range: Uganda to S Africa.

***Chlorophytum affine* var. *curviscapum* (Poelln.) Hanid** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Raymer 611 (EA). Native distribution range: Tropical Africa, Yemen.

***Chlorophytum africanum* var. *silvaticum* (Dammer) Meerts** – Habit: Herb. Habitat: Grassland, rock outcrop, open woodlad, 1800–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: S Ethiopia to S Tropical Africa.

***Chlorophytum blepharophyllum* Schweinf. ex Baker** – Habit: Herb. Habitat: Woodland, grassland, rocky outcrops, 1500–2450 m. Voucher: Polhill RM 413 (BR). Native distribution range: Tropical Africa.

***Chlorophytum cameronii* (Baker) Kativu** – Habit: Herb. Habitat: Grassland, rocky slopes, 1675–2550 m. Vouchers: Symes 373 (EA), Rayner WR 544 (EA), Lugard EJ 2804 (EA), Jack C 253 (EA), Padwa JH 22 (EA), Tweedie EM 5452 (EA), Adamson J 508 (508). Native distribution range: Tropical Africa.

***Chlorophytum comosum* (Thunb.) Jacques** – Habit: Herb. Habitat: Forest, outcrop rock, 1800–3000 m. Voucher: Lugard EJ; Lugard C 629 (K). Native distribution range: W Tropical Africa to Cameroon, Ethiopia to S Africa.

***Chlorophytum gallabatense* Schweinf. ex Baker** – Habit: Herb. Habitat: Grassland, open woodland, 750–2439 m. Vouchers: Tweedie EM 1998 (K), Polhill RM 410 (BR), Tweedie DR 1354 (BR). Native distribution range: Tropical Africa to Namibia.

***Chlorophytum polystachys* Baker** – Habit: Herb. Habitat: Outcrop rock, open woodland, 1750–2900 m. Voucher: Tweedie EM 1354 (K). Native distribution range: Tropical Africa.

***Chlorophytum subpetiolatum* (Baker) Kativu** – Habit: Herb. Habitat: Outcrop rock, grassland, woodland, 1750–2450 m. Voucher: Polhill 398 (K). Native distribution range: Tropical Africa.

***Chlorophytum viridescens* Engl.** – Habit: Herb. Habitat: Rock outcrops, grassland, riverbanks, 1750–2700 m. Voucher: Polhill 410 (EA). Native distribution range: Cameroon, E Tropical Africa.

***Dracaena afromontana* Mildbr.** – Habit: Shrub or tree. Habitat: Moist forest, bamboo forest, 1600–3200 m. Vouchers: Lye KA; Pocs T 23128 (K), Dummer RA 3604 (K), Snowden JD 804 (EA, K), Tiyoy LM 1280 (K), Rono et al. SAJIT-PR 0175 (EA, HIB). Native distribution range: South Sudan (Imatong Mountains) to Malawi.

***Dracaena conspicua* (N.E.Br.) Byng & Christenh.** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie 1441 (K). Native distribution range: Kenya to S Tropical Africa.

***Dracaena fragrans* (L.) Ker Gawl.** – Habit: Shrub or tree. Habitat: Forest, near streams, 600–2250 m. Vouchers: Jackson THE 338 (K)? Jack? 5195 (K). Native distribution range: Tropical Africa.

***Dracaena frequens* (Chahin.) Byng & Christenh.** – Habit: Herb. Habitat: Bushland, rocky sites, secondary grassland, 50–2600 m. Voucher: Tweedie 1441 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Dracaena steudneri* Engl.** – Habit: Tree. Habitat: Moist forest, 2250–3000 m. Voucher: Jack C 427 (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Drimia altissima* (L.f.) Ker Gawl.** – Habit: Herb. Habitat: Wet savanna, grassland, 1750–2250 m. Voucher: Lugard EJ; Lugard C 558 (EA). Native distribution range: Tropical & S Africa.

****Drimia congesta* Bullock** – Habit: Herb. Habitat: Grassland, rocky outcrop, moorland, 2800–3000 m. Vouchers: Lugard EJ; Lugard C 474 (K), Thoma AS 2628 (MO). Native distribution range: Uganda to Kenya.

***Drimia elata* Jacq.** – Habit: Herb. Habitat: Wet savanna, grassland, 1250–2500 m. Vouchers: O'Brien (EA), Lugard EJ; Lugard C 563 (K). Native distribution range: South Sudan to S Africa.

****Drimia porphyrantha* (Bullock) Stedje** – Habit: Herb. Habitat: Grassland, 2000–2300 m. Voucher: Lugard EJ; Lugard C 556 (K). Native distribution range: Kenya.

***Eriospermum abyssinicum* Baker** – Habit: Herb. Habitat: Wet rocky grassland, 2000–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Eriospermum triphyllum* Baker** – Habit: Herb. Habitat: Grassland, outcrop rock, 1800–2400 m. Voucher: Tweedie 906 (EA). Native distribution range: S Ethiopia to S Tropical Africa.

***Ledebouria revoluta* (L.f.) Jessop** – Habit: Herb. Habitat: Outcrop rock, bushland, grassland, woodland, 1800–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula, India, Sri Lanka.

***Ornithogalum gracillimum* R.E.Fr.** – Habit: Herb. Habitat: Grassland, 2000–3000 m. Vouchers: Polhill RM 406 (EA, BR), Rono et al. SAJIT-PR 0110 (EA, HIB). Native distribution range: S Ethiopia to Kenya.

EX***Ornithogalum gussonei* Ten.** – Habit: Herb. Habitat: Grassland, bushland, woodland, swampy regions, 1000–3000 m. Voucher: Polhill 415 (EA). Native distribution range: Italy, Greece to SW Turkey.

## F19. ASPHODELACEAE

3 Genera, 7 species

*****Aloe elgonica* Bullock** – Habit: Shrub. Habitat: Grass covered slopes, rock pockets, 1980–2400 m. Vouchers: Tweedie 2406 (EA), Tweedie EM 343 (K), Brandham 98 (MO), Brandham PE; Cutler DF 11 (K), Lugard 299 (K), Brandham PE;

Cutler DF 94 (K), Reynolds GW 8003 (EA), Rono et al. SAJIT-PR 0089 (EA, HIB). Native distribution range: Kenya (Mt Elgon).

*****Aloe wilsonii* Reynolds** – Habit: Herb. Habitat: Rocky slopes, cliffs, 1525–3000 m. Vouchers: Tweedie DR 1424 (K), Reynolds 9041 (K). Native distribution range: N Uganda to NW Kenya.

*****Aloe wollastonii* Rendle** – Habit: Shrub. Habitat: Grassland, woodland, 1750–2285 m. Vouchers: Tweedie 322 (EA), Irwin PH 355 (EA). Native distribution range: E Central Tropical Africa.

***Bulbine abyssinica* A.Rich.** – Habit: Herb. Habitat: Grassland, outcrop rock, 2000–3200 m. Vouchers: Hedberg O (UPS), Rono et al. SAJIT-PR 0107 (EA, HIB). Native distribution range: Ethiopia to S Africa, Yemen.

***Kniphofia grantii* Baker** – Habit: Herb. Habitat: Damp grassland, 750–2700 m. Voucher: Snowden JD 847 (EA). Native distribution range: Uganda to Zambia.

***Kniphofia thomsonii* Baker** – Habit: Herb. Habitat: Forest, bushland, grassland, marshy grounds, 1900–3960 m. Vouchers: Hedberg O 4467 (EA), Snowden JD 944 (EA), Wright CH 5455 (EA), Lugard EJ 83 (EA), Rono et al. SAJIT-PR 0149 (EA, HIB). Native distribution range: Ethiopia to N Tanzania.

******Kniphofia thomsonii* var. *snowdenii* (C.H.Wright) Marais** – Habit: Herb. Habitat: Montane grassland, bushland, 2100–4000 m. Vouchers: Tothill BH 2284 (EA), Hedberge 4467 (EA), Tweedie 1279 (EA), Snowden JL 437 (K). Native distribution range: Uganda to Kenya.

## F20. COLCHICACEAE

4 Genera, 5 species

EX***Androcymbium melanthioides* Willd.** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Zimbabwe to S Africa.

***Colchicum striatum* (Hochst. ex A.Rich.) J.C.Manning & Vinn.** – Habit: Herb. Habitat: Rock outcrop, evergreen woodland, bushland, grassland, 1500–3480 m. Voucher: Symes 378 (EA). Native distribution range: Eritrea to S Africa.

***Gloriosa superba* L.** – Habit: Herb. Habitat: Wet savanna, outcrop rock, woodland, evergreen forests and bushlands, 1750–2400 m. Vouchers: Cheseny CM 9 (BR), Lindblom G sn (S). Native distribution range: Widespread in tropical and southern Africa and in tropical Asia.

***Wurmbea tenuis* (Hook.f.) Baker** – Habit: Herb. Habitat: Upland grassland, forests, 2000–3500 m. Vouchers: Hamilton A; Wendelbo P 6616 (K), Rono et al. SAJIT-PR 0144 (EA, HIB). Native distribution range: Tropical & S Africa.

*****Wurmbea tenuis* subsp. *hamiltonii* (Wendelbo) B.Nord.** – Habit: Herb. Habitat: Upland grassland, rock outcrop, 2000–3500 m. Vouchers: Hamilton A; Wendelbo P 6616 (K), Rono et al. SAJIT-PR 0020 (EA, HIB), Tweedie 575 (EA). Native distribution range: E Tropical Africa.

## F21. COMMELINACEAE

4 Genera, 27 species

***Aneilema hirtum* A.Rich.** – Habit: Herb. Habitat: Grassland, woodland, 1750–2050 m. Vouchers: Tweedie 76B,175 (EA), Tweedie EM 464 (K). Native distribution range: Ethiopia to Zambia.

***Aneilema leiocaule* K.Schum.** – Habit: Herb. Habitat: Upland Forest, forest edges, 1000–2750 m. Voucher: Tweedie EM 752 (K). Native distribution range: S Ethiopia to E DR Congo.

****Aneilema minutiflorum* Faden** – Habit: Herb. Habitat: Montane, riverine forest, 1800–2500 m. Vouchers: Lewis WH 5973 (US), Hemp A 5442 (US), Wesche K 1965 (US). Native distribution range: E Tropical Africa.

***Aneilema spekei* C.B.Clarke** – Habit: Herb. Habitat: Bushland, grassland, woodland, roadsides, 700–1800 m. Vouchers: Tweedie EM 759, 1885, (K). Native distribution range: Ethiopia to Zambia.

***Commelina africana* L.** – Habit: Herb. Habitat: Grassland, weed in disturbed places, 300–2900 m. Vouchers: Tweedie 785 (K), Wesche K 568 (K). Native distribution range: Africa, Arabian Peninsula.

EX***Commelina africana* var. *krebsiana* (Kunth) C.B.Clarke** – Habit: Herb. Habitat: Upper Forest edge, 3000–3150 m. Vouchers: Lind EM 460 (K), Tweedie 1392 (K). Native distribution range: S Tropical & S Africa, Comoros.

***Commelina benghalensis* L.** – Habit: Herb. Habitat: Bushland, woodland, moist grassland, cultivation, 010–2350 m. Vouchers: Tweedie 787 (K), Lewis WH 5961 (US). Native distribution range: Tropical & Subtropical Old World.

***Commelina diffusa* Burm.f.** – Habit: Herb. Habitat: Woodland, swamps, forest clearings, caltivations, 1750–3400 m. Voucher: Wesche K 1853 (US). Native distribution range: Tropical & Subtropical Old World.

***Commelina eckloniana* subsp. *echinosperma* (K.Schum.) Faden** – Habit: Herb. Habitat: Rocky grassland, 1050–2050 m. Voucher: Tweedie 1350, 3444 (EA). Native distribution range: Ethiopia to Zambia.

***Commelina erecta* subsp. *erecta*** – Habit: Herb. Habitat: Wet grassland, outcrop rock, 550–1500 m. Voucher: Tweedie EM 4165 (EA). Native distribution range: America, Tropical & S Africa, Arabian Peninsula.

*****Commelina kitaleensis* Faden** – Habit: Herb. Habitat: Swamps, seasonally wet grassland, forest edge, 1800–2000 m. Vouchers: Irwin 146 (EA), Tweedie EM EM; Faden RB; Evans A 69/715 (K). Native distribution range: Kenya (E Mt Elgon).

***Commelina latifolia* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Wet savanna, among rocks, forests, 1100–2100 m. Vouchers: Faden RB & Evans AJ 69/714 (US). Native distribution range: Congo to Ethiopia and N Tanzania, SW Arabian Peninsula.

***Commelina purpurea* C.B.Clarke** – Habit: Herb. Habitat: Wooded grassland, woodlands, forest edge, outcrop rock, 1800–2250 m. Vouchers: Lugard 145 (K), Wesche K 1507 (US), Faden RB & Evans AJ 69/737B (US), Lewis WH 5960 (US),

Rono et al. SAJIT-PR 0023 (EA, HIB). Native distribution range: Congo to South Sudan and Tanzania.

***Commelina reptans* Brenan** – Habit: Herb. Habitat: Outcrop rock, seasonally moist grasslands, 1800–2550 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: S Ethiopia to Burundi and N Tanzania.

***Commelina schweinfurthii* C.B.Clarke** – Habit: Herb. Habitat: grassland, rocky araes, swamps, forests edges, roadside, 1750–2350 m. Vouchers: Lewis WH 5974, Rono et al. SAJIT-PR 0022 (EA, HIB). Native distribution range: Tropical Africa.

***Commelina schweinfurthii* subsp. *schweinfurthii*** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Vouchers: Lugard EJ; Lugard C 549 (K), Tweedie 786 (K), Lewis WH 5974 (US), Faden RB & Evans AJ 69/717 (US). Native distribution range: Tropical Africa.

***Commelina subulata* Roth** – Habit: Herb. Habitat: Forest, rock outcrop, wet grasslands, bushlands, 1750–2300 m. Voucher: Lewis WH 5975 (US). Native distribution range: Tropical & S Africa, Arabian Peninsula, S India.

***Commelina triangulispatha* Mildbr.** – Habit: Herb. Habitat: Moist roadside banks, damp pastures, wooded grasslands and woodland, 1650–2300 m. Voucher: Thomas 414 (EA). Native distribution range: DR Congo to E Tropical Africa.

***Cyanotis arachnoidea* C.B.Clarke** – Habit: Herb. Habitat: outcrop rock, 1800–2600 m. Vouchers: Rono et al. SAJIT-PR 0027, SAJIT-PR 0128 (EA, HIB). Native distribution range: W Tropical Africa to Tanzania, India to Taiwan.

***Cyanotis caespitosa* Kotschy & Peyr.** – Habit: Herb. Habitat: Grassland, rock outcrop, 2150–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Cyanotis foecunda* DC. ex Hassk.** – Habit: Herb. Habitat: Outcrop rock near rivers, bushland, woodlands, occasionally in swampy places, 1800–2400 m. Vouchers: Tweedie EM 3466 (K), Lewis WH 5964 (US). Native distribution range: Cameroon to Ethiopia and N Botswana, Arabian Peninsula.

***Cyanotis lanata* Benth.** – Habit: Herb. Habitat: Grassland, woodland, 1750–2150 m. Vouchers: Tweedie EM 782 (K), Lewis WH 5976 (US), Rono et al. SAJIT-PR 0142 (EA, HIB). Native distribution range: Tropical & S Africa, Arabian Peninsula.

***Cyanotis longifolia* Benth.** – Habit: Herb. Habitat: Wet savanna, grassland, bamboo clumps, 1750–2250 m. Voucher: Stein W Bie (UPS). Native distribution range: Tropical Africa to NE Namibia.

***Cyanotis paludosa* Brenan** – Habit: Herb. Habitat: Marshes, open grassland., 1100–2000 m. Vouchers: Tweedie 3655 (EA), Faden RB & Evans AJ 69/716 (US). Native distribution range: DR Congo to E Tropical Africa.

***Cyanotis vaga* (Lour.) Schult. & Schult.f.** – Habit: Herb. Habitat: Grassland, forest edge clearing, moorland, rock outcrop, 1650–4150 m. Vouchers: Tweedie Mrs 1420, 1351 (K), Wesche K 1800, 1655 (US), Dummer RA 3383 (EA). Native distribution range: Tropical Africa, SW Arabian Peninsula, Himalaya to W Malesia.

***Murdannia semiteres* (Dalzell) Santapau** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Vouchers: Tweedie EM 926 (K), Tweedie EM 161 (K). Native distribution range: Uganda to Zambia, Iran to Indo-China.

***Murdannia simplex* (Vahl) Brenan** – Habit: Herb. Habitat: Grassland, bushland, woodland, 1750–2200 m. Vouchers: Lind EM 450 (EA), Tweedie EM 161 (K). Native distribution range: Tropical & S Africa, Madagascar, Tropical & Subtropical Asia to N. Australia.

## F22. CYPERACEAE

7 Genera, 59 species

***Abildgaardia ovata* (Burm.f.) Kral** – Habit: Herb. Habitat: Grassland, 0–2000 m. Vouchers: Human observation sn (EA). Native distribution range: Tropics & Subtropics.

***Bulbostylis atrosanguinea* C.B.Clarke** – Habit: Herb. Habitat: Afroalpine grassland, rocky moorland, 2000–3700 m. Voucher: Wesche K 1369 (K). Native distribution range: Eritrea to Angola, Yemen.

***Bulbostylis congolensis* De Wild.** – Habit: Herb. Habitat: Grassland, bushland, rocky outcrops, 1050–1400 m. Voucher: Human observation sn (EA). Native distribution range: Tropical Africa.

***Bulbostylis densa* subsp. *afromontana* (Lye) R.W.Haines** – Habit: Herb. Habitat: Upland grassland, forest, 1200–2600 m. Voucher: Lind EM 271 (EA). Native distribution range: Tropical & S Africa.

****Bulbostylis glaberrima* Kük.** – Habit: Herb. Habitat: Moorland rocks, 3000–3600 m. Vouchers: Hedberg 4545 (EA), Hamilton 233 (EA). Native distribution range: E Uganda to W Central Kenya.

***Bulbostylis oligostachys* C.B.Clarke** – Habit: Herb. Habitat: Wet rocks, wooded grassland, 1800–2500 m. Voucher: Wesche K 1422 (EA). Native distribution range: Eritrea to Angola.

***Bulbostylis pilosa* (Willd.) Cherm.** – Habit: Herb. Habitat: Flooded wooded grassland, bushland, 1–1400 m. Voucher: Human observation sn (EA). Native distribution range: Tropical Africa.

***Carex bequaertii* De Wild.** – Habit: Herb. Habitat: Wet montane, alpine grasslands, 2000–3600 m. Vouchers: Wesche K 1208 (EA), Haines W 4165 (K), Lugard C; Verdcourt B 482 (K). Native distribution range: Ethiopia to S Africa.

***Carex castanostachya* K.Schum. ex Kük.** – Habit: Herb. Habitat: Moist Forest, bamboo thickets, 1850–2050 m. Voucher: Human observation sn (EA). Native distribution range: Kenya (Taita Hills) to Tanzania.

***Carex conferta* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Swamps, bamboo forest, moorland, upland forest, 2250–3650 m. Vouchers: Wesche K 77 (K), 1939 (K), Mwangangi OM 364 (BR), Hedberg O 1034 (K), Dummer RA 3461 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Carex echinochloe* Kunze** – Habit: Herb. Habitat: Woodland edges, grasslands, bamboo, marshes, 900–2750 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Bioko to Ethiopia and Tanzania.

*****Carex elgonensis* Nelmes** – Habit: Herb. Habitat: Heath zones, bamboo forest, 2400–3650 m. Voucher: Adamson J 493 (K, EA), Hedberg 4555 (EA), Wesche K 1170 (EA), Bogdan A 5409 (K), George Taylor 3474 (NHMUK), Lye, Katende & Swinscow 5741 (EA). Native distribution range: E Tropical Africa (Mt Elgon).

***Carex erythrorrhiza* Boeckeler** – Habit: Herb. Habitat: Streamside, heath zone, rock outcrops, 2400–3500 m. Vouchers: Bogdan 5425A, 5425B (EA), Thomas AS 2667 (EA), Wesche K 1947 (EA). Native distribution range: Ethiopia to E DR Congo and N Tanzania.

***Carex fischeri* K.Schum.** – Habit: Herb. Habitat: Moist Forest, Hagenia and bamboo zone, 21500–4300 m. Vouchers: Dummer RA 3465 (K, S), Lisowski S 10936 (BR). Native distribution range: Ethiopia to E Central and E Tropical Africa.

***Carex johnstonii* Boeckeler** – Habit: Herb. Habitat: Forest, 2200–3300 m. Vouchers: Tothill BH 2266 (EA), Bogdan A 4130 (K), Smith SAL 185 (K). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Carex lycurus* subsp. *scabrida* (Kük.) Verdc.** – Habit: Herb. Habitat: Swampy grassland, riverine montane forest, 2350–3300 m. Vouchers: Haines 4154 (EA), Bogdan 3935 (EA). Native distribution range: Cameroon, E Central, Tropical Africa (Mountains).

***Carex mannii* E.A.Bruce** – Habit: Herb. Habitat: Swamps in upland forest, 2450–3100 m. Vouchers: Liebenberg L 1708 (US), Dummer RA 3459 (US). Native distribution range: Bioko, SW Cameroon, Ethiopia to Burundi and Kenya.

***Carex monostachya* A.Rich.** – Habit: Herb. Habitat: Alpine bushland, forest, moorland, upper bamboo forest, 2700–4321 m. Voucher: Hedberg 127 (K). Native distribution range: N Ethiopia to Tanzania (Mt Kilimanjaro).

***Carex petitiana* A.Rich.** – Habit: Herb. Habitat: Forest, bamboo forest, grassland, heath by streams, 2400–3450 m. Vouchers: Wood G 121 (EA), Bogdan A 4088 (K), 5388 (K), 4129, Hedberg O 192 (K), 192 (K), Haines W 4164 (K), Trelawny BR 4343 (K), Mwangangi OM 373 (BR). Native distribution range: Nigeria to Cameroon, Ethiopia to Zimbabwe.

****Carex runssoroensis* K.Schum.** – Habit: Herb. Habitat: Moorland, 2700–4100 m. Vouchers: Liebenberg L sn (US), Dummer RA 3361 (US), Bogdan 3934, 5413 (EA), Haines 4156 (EA). Native distribution range: NE DR Congo to Kenya (Mountains).

***Carex simensis* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Swampy grassland, montane forest, moorland, 1850–3900 m. Vouchers: Lugard 680 (EA), Herdberg 1043 (EA), Wesche K 1809 (EA). Native distribution range: Ethiopia to E DR Congo.

***Carex steudneri* Boeckeler** – Habit: Herb. Habitat: Montane grassland, montane bushlands, bamboo zone, rock crevices, woodland, 2300–3050 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Africa.

***Cyperus alatus* subsp. *albus* (Nees) Lye** – Habit: Herb. Habitat: Dry bushlands, 500–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Seychelles.

***Cyperus albosanguineus* Kük.** – Habit: Herb. Habitat: Seasonally wet grassland, moorland, seepages in rock crevices, 1550–4000 m. Vouchers: Granvik H 323 (S), Wood G 146 (EA), Hedberg O 43 (K). Native distribution range: South Sudan to E Tropical Africa.

***Cyperus amauropus* Steud.** – Habit: Herb. Habitat: Dry rocky grassland, 500–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Zimbabwe, Arabian Peninsula.

***Cyperus aromaticus* (Ridl.) Mattf. & Kük.** – Habit: Herb. Habitat: Streamside, forest margin, wet grassland, 1950–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Cyperus assimilis* Steud.** – Habit: Herb. Habitat: Streamside, seasonal pools, rock outcrops, 250–2100 m. Voucher: Lind EM 236 (EA). Native distribution range: Eritrea to S Africa, Madagascar.

****Cyperus boreochrysocephalus* Lye** – Habit: Herb. Habitat: Dry wooded grassland, 1000–2200 m. Voucher: Mabberley 1128 (EA). Native distribution range: South Sudan to NW Tanzania.

***Cyperus bracheilema* (Steud.) Mattf. & Kük.** – Habit: Herb. Habitat: Woodland, 1500–3400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Tanzania, S Africa.

***Cyperus brevifolius* (Rottb.) Endl. ex Hassk.** – Habit: Herb. Habitat: Swampy grassland, forest margins, 1600–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropics & Subtropics.

***Cyperus costatus* Mattf. & Kük.** – Habit: Herb. Habitat: Dry rocky grassland, 1250–2900 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S. Tropical Africa.

***Cyperus cyperoides* (L.) Kuntze** – Habit: Herb. Habitat: Grassland, woodland, 100–2200 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa to Pacific.

***Cyperus derreilema* Steud.** – Habit: Herb. Habitat: Moist montane forest, bamboo forest, along streams, 2100–3050 m. Voucher: Wesche K 627 (EA). Native distribution range: Ethiopia to Malawi.

***Cyperus distans* L.f.** – Habit: Herb. Habitat: Moist site, streamside in forest edges, cultivation, 1800–2100 m. Voucher: Human observation sn (EA). Native distribution range: Tropics & Subtropics.

***Cyperus elegantulus* Steud.** – Habit: Herb. Habitat: Swamps, riverine edges, moist forest margins, 1100–3050 m. Voucher: Beentje HJ 1961 (WAG). Native distribution range: Tropical & S Africa to Arabian Peninsula.

***Cyperus fischerianus* Schimp. ex A.Rich.** – Habit: Herb. Habitat: Moist montane, riverine forest, 1750–2650 m. Voucher: Lye & Katende 6410 (EA). Native distribution range: Eritrea to S Tropical Africa.

***Cyperus isolepis* (Nees ex Arn.) Bauters** – Habit: Herb. Habitat: Grassland, 1750–2000 m. Voucher: Gilbert & Mesfin 6549 (EA). Native distribution range: Tropical & Subtropical Old World.

****Cyperus karisimbiensis* (Cherm.) Kük.** – Habit: Herb. Habitat: Woodland, alpine streamsides, 1850–3050 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: E Central & E Tropical African Mountains.

****Cyperus kerstenii* Boeckeler** – Habit: Herb. Habitat: Alpine moor, montane grassland, 2500–3600 m. Voucher: Lye 5750 (EA). Native distribution range: South Sudan to E Tropical African Mountains.

***Cyperus luteus* Boeckeler** – Habit: Herb. Habitat: Grassland, forest plantation, 2400–3600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: SW Cameroon, Gabon, Uganda to Malawi, W Indian Ocean.

***Cyperus mapanioides* C.B.Clarke** – Habit: Herb. Habitat: Forest paths, 900–1800 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Cyperus maranguensis* K.Schum.** – Habit: Herb. Habitat: Grassland, swampy grasslands, cultivations, 800–2150 m. Voucher: Lye & Katende 6423 (EA). Native distribution range: S Ethiopia to Tanzania.

***Cyperus melanospermus* (Nees) Valck.Sur.** – Habit: Herb. Habitat: Swampy grassland, streamside, 1000–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Old World.

***Cyperus microaureus* Lye** – Habit: clustered annual. Habitat: Bushlands, wet rocky outcrops, grassland, 1750–1950 m. Voucher: fide Haine & Lye,Napper (EA). Native distribution range: Ethiopia to Zambia.

***Cyperus mollipes* K.Schum.** – Habit: Herb. Habitat: Grasslands, 2100–2750 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Central African Republic to Ethiopia and S Tropical Africa, India to Thailand.

***Cyperus niveus* Retz.** – Habit: Herb. Habitat: Grassland in rocky pockets, 100–2200 m. Voucher: Hedberg O 813 (K). Native distribution range: Tropical and S Africa to S Central China.

***Cyperus niveus* var. *leucocephalus* (Kunth) Fosberg** – Habit: Herb. Habitat: Dry grassland, recently burnt areas, 0–2100 m. Voucher: Dale IR 4117 (BR). Native distribution range: Tropical & S Africa, Aldabra, S Madagascar, Arabian Peninsula.

***Cyperus plateilema* (Steud.) Kük.** – Habit: Herb. Habitat: Mountain grassland, giant heath zones, roadside, moist forest, 1750–3650 m. Vouchers: Bogdan 5398 (EA), Wesche K 544 (EA). Native distribution range: Eritrea to N Tanzania, Yemen (J Ta'kar).

***Cyperus platycaulis* Baker** – Habit: Herb. Habitat: Wet areas, swamps in bamboo zone, 1000–3000 m. Voucher: Naiga 419 (EA). Native distribution range: Chad to South Africa, Madagascar.

***Cyperus rigidifolius* Steud.** – Habit: Herb. Habitat: Swamps, bushlands, wet grassland, 1800–2100 m. Vouchers: Snowden JD 1030 (EA), Dummer RA 3627 (US), Padwa JH 31 (WAG). Native distribution range: Eritrea to S Africa, Arabian Peninsula.

***Cyperus rubicundus* Vahl** – Habit: Herb. Habitat: Wet grassland, rocky wooded grassland, 0–2300 m. Voucher: Human observation sn (EA). Native distribution range: Africa to India, Lesser Sunda Islands to N Australia.

***Cyperus sesquiflorus* (Torr.) Mattf. & Kük. subsp. *sesquiflorus*** – Habit: Herb. Habitat: Upper forest levels, 1300–3300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropics & Subtropics.

***Cyperus usitatus* Burch. ex Roem. & Schult.** – Habit: Herb. Habitat: Rocky slopes and outcrop, flooded grassland, 800–2150 m. Voucher: Lye & Katende 6422 (EA). Native distribution range: Ethiopia to S Africa.

***Ficinia gracilis* Schrad.** – Habit: Herb. Habitat: Upland grassland, moorland, alpine grassland, 2400–4321 m. Voucher: Smith, Beentje & Muasya 179 (EA). Native distribution range: Uganda to S Africa.

***Isolepis costata* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Montane forest, stream banks, seepage area, 1700–3500 m. Vouchers: Lisowski S 10799 (EA), Dummer RA 3543 (US). Native distribution range: Ethiopia to S Africa, Madagascar.

***Isolepis fluitans* (L.) R.Br.** – Habit: Herb. Habitat: Montane forest, on or in shallow water, bog, 1200–3700 m. Vouchers: Dummer RA 3501 (US), Hedberg O (UPS). Native distribution range: Old World.

*****Isolepis graminoides* (R.W.Haines & Lye) Lye** – Habit: Herb. Habitat: Alpine bogs, 3200–3500 m. Vouchers: Hamilton 1418, 4319, Forbes 277 (EA). Native distribution range: E Tropical Africa (Ruwenzori, Mt Elgon).

***Isolepis setacea* R.Br.** – Habit: Herb. Habitat: Wet open grassland, 2400–3800 m. Vouchers: Haines 4151, Dummer RA 3494 (EA, US). Native distribution range: Temperate & Subtropical Eurasia, Africa.

***Scleria woodii* C.B.Clarke** – Habit: Herb. Habitat: Wet grassland, 1000–2100 m. Vouchers: Lugard C Mrs 667B, 667A (EA). Native distribution range: Tropical & S Africa.

## F23. DIOSCOREACEAE

1 Genus, 2 species

***Dioscorea quartiniana* A.Rich.** – Habit: Climber. Habitat: Bushland, wooded grassland, 1750–2300 m. Vouchers: Tweedie 1404 (EA), Snowden JD 520, 910 (K), Lugard C 674 (K), Lye KA; Pócs T 23134 (K), Tweedie DR O 205 (BR). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Dioscorea schimperiana* Hochst. ex Kunth** – Habit: Twinning herb. Habitat: Forest margin, wooded grassland, riverine forest, 1600–2150 m. Vouchers: Tweedie EM 1839 (K), 2845 (K) 2847 (K), Irwin PH 185 (K), Jack C 274 (K), Coll S 453 (K). Native distribution range: Tropical Africa.

## F24. ERIOCAULACEAE

1 Genus, 3 species

***Eriocaulon abyssinicum* Hochst.** – Habit: Herb. Habitat: Mist zone of waterfall, wet grassland, 1650–2750 m. Vouchers: Lind EM 247 (EA), Wood 446 (EA). Native distribution range: N. Nigeria to Eritrea and S Africa, Madagascar.

***Eriocaulon mesanthemoides* Ruhland** – Habit: Herb. Habitat: Upper edge of forest, montane grassland, moorland, 2400–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya to Malawi.

***Eriocaulon schimperi* Körn. ex Ruhland** – Habit: Herb. Habitat: Afroalpine grassland, bamboo zone, 2440–3500 m. Voucher: Hooper SS & Townsend CC 1392 (EA). Native distribution range: Ethiopia to Malawi.

## F25. HYDROCHARITACEAE

3 Genera, 3 species

*******Lagarosiphon hydrilloides* Rendle** – Habit: Aquatic herb. Habitat: Still or flowing fresh water, 1650–3500 m. Voucher: Lugard EJ; Lugard C 534 (K). Native distribution range: Kenya to Uganda.

**EX***Najas pectinata* Magnus** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Senegal to Sinai.

***Ottelia ulvifolia* (Planch.) Walp.** – Habit: Herb. Habitat: Wetland, streams, 1750–2700 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Madagascar.

## F26. HYPOXIDACEAE

1 Genus, 4 species

***Hypoxis angustifolia* Lam.** – Habit: Herb. Habitat: Wet savanna, 1300–3000 m. Voucher: Hedberg O (UPS). Native distribution range: Tropical & S Africa, W Indian Ocean, SW Arabian Peninsula.

***Hypoxis fischeri* Pax** – Habit: Herb. Habitat: Grassland, wooded grassland, 1500–2600 m. Voucher: Snowden JD 822 (EA). Native distribution range: Cameroon, S Sudan to S Tropical Africa.

***Hypoxis obtusa* Burch.** – Habit: Herb. Habitat: Wet savanna, swamp edges, 1750–2750 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Uganda to S Africa.

**EX***Hypoxis villosa* L.f.** – Habit: Herb. Habitat: Burnt grassland, 1700–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: S Africa.

## F27. IRIDACEAE

8 Genera, 17 species

***Aristea abyssinica* Pax ex Engl.** – Habit: Herb. Habitat: Wet savanna, woodland, upper edge of forest, grassland, 1400–3800 m. Voucher: Mwangangi OM 363 (EA). Native distribution range: Tropical & S Africa.

***Aristea alata* Baker** – Habit: Herb. Habitat: Grass glades, forest edges, bamboo edge, 1800–3500 m. Voucher: Rono et al. SAJIT-PR 0125 (EA, HIB). Native distribution range: Ethiopia to E Tropical Africa.

***Aristea angolensis* Baker** – Habit: Herb. Habitat: Wet grassland, 1700–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Dierama cupuliflorum* Klatt** – Habit: Herb. Habitat: Montane grassland, heath, 2000–3900 m. Vouchers: Adamson J 451 (K), Ludanga RI 337 (K), Dummer RA 3315 (EA), Tothill BH 2422 (EA), Rono et al. SAJIT-PR 0136 (EA, HIB). Native distribution range: Ethiopia to N Malawi.

EX***Dierama pendulum* Baker** – Habit: Herb. Habitat: Moorland, 3150–4321 m. Voucher: Svein Manum (O). Native distribution range: South Africa.

***Dietes iridioides* (L.) Sweet ex Klatt** – Habit: Herb. Habitat: Thickets, riverine forests, 1500–2300 m. Voucher: Tweedie 165 (EA). Native distribution range: Ethiopia to S Africa.

***Freesia laxa* (Thunb.) Goldblatt & J.C.Manning** – Habit: Herb. Habitat: Rocky Mountain slopes, forest margin, 1800–2000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: W Kenya to S Africa.

***Gladiolus dalenii* Van Geel** – Habit: Herb. Habitat: Wet upland grassland, 1750–3100 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Madagascar, SW Arabian Peninsula.

***Gladiolus dichrous* (Bullock) Goldblatt** – Habit: Herb. Habitat: Outcrop rocks on cliffs, 2000–3500 m. Vouchers: Saunders & Hancock 34 (EA), Lankester CH sn (K). Native distribution range: South Sudan to W Kenya.

***Hesperantha petitiana* Baker** – Habit: Herb. Habitat: Subalpine, alpine grassland, 1800–4000 m. Vouchers: Tweedie 42, 9, 121 (EA), Bickford N 53, 34 (EA), J. Wilson 1196 (EA). Native distribution range: Cameroon, Ethiopia to Zimbabwe.

****Moraea afro-orientalis* Goldblatt** – Habit: Herb. Habitat: Wet grasslands, 1400–2400 m. Vouchers: Friis I; Hansen OJ 2568 (EA, K), Lugard EJ; Lugard C 573 (K), Adamson J 513 (K), Wesche K 1318 (K), Bridson DM 64 (K), Polhill 411 (K). Native distribution range: South Sudan to E Tropical Africa.

EX***Moraea carsonii* Baker** – Habit: Herb. Habitat: Open short grassland, outcrop rock, 1600–2400 m. Voucher: Polhill R 411 (K). Native distribution range: Sudan to W Botswana.

***Moraea stricta* Baker** – Habit: Herb. Habitat: Rocky grasslands, 1600–3000 m. Voucher: Rono et al. SAJIT-PR 0021 (EA, HIB). Native distribution range: Ethiopia to S Africa.

EX***Moraea vegeta* L.** – Habit: Herb. Habitat: Wet savanna, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: South Africa.

***Romulea camerooniana* Baker** – Habit: Herb. Habitat: Woodland, upper edge forest, wet grassland and subalpine stony soils, 1750–3150 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon, S Ethiopia to S Africa.

***Romulea congoensis* Bég.** – Habit: Herb. Habitat: Alpine grassland, mossy seeps, 3300–4200 m. Vouchers: Hamilton & Perrott 30 (EA). Native distribution range: Ethiopia to Rwanda.

***Romulea fischeri* Pax** – Habit: Herb. Habitat: Wet upland and subalpine stony grassland, 2700–4200 m. Vouchers: Tweedie EM 2051 (K), Snowden JD 470 (EA), Rono et al. SAJIT-PR 0108, SAJIT-PR 0126 (EA, HIB). Native distribution range: NE Tropical Africa to Uganda, Socotra, SW Arabian Peninsula.

## F28. JUNCACEAE

2 Genera, 6 species

***Juncus capitatus* Weigel** – Habit: Herb. Habitat: Ephemeral wetland, 4000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Europe to Kazakhstan, Macaronesia, Mediterranean to Kenya, Cameroon, S Africa.

***Juncus dregeanus* Kunth** – Habit: Herb. Habitat: Alpine forest, streamside, moor grassland, bog, 2900–3400 m. Vouchers: Lye KA, Katende A & Swinscow D (UPS). Native distribution range: Cameroon to Sudan and S Africa.

***Juncus effusus* L.** – Habit: Herb. Habitat: Moorland marshes, 1500–3300 m. Voucher: Hedberg 180 (EA). Native distribution range: Temperate Northern Hemisphere to W South America, Rwanda to S Africa, W Indian Ocean.

***Luzula abyssinica* Parl.** – Habit: Herb. Habitat: Wet alpine forest, streamside, seepages, 2000–4300 m. Vouchers: Bogdan 4139, Ekkens DB 623 (EA), Mwangangi OM 350 (EA), Svein Manum 44 (O). Native distribution range: Ethiopia to E & E Central Tropical Africa.

***Luzula johnstonii* Buchenau** – Habit: Herb. Habitat: Alpine wet grasslands, 2400–4200 m. Vouchers: Hedberg 213 (EA), Dummer RA 3548 (EA), Bogdan A 4128 (EA), Hedberg O 975 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

*****Luzula mannii* subsp. *gracilis* (S.Carter) Kirschner & Cheek** – Habit: Herb. Habitat: Upland grassland, wet places, by streams, moorland, 2700–3700 m. Vouchers: Hedberg 186 (EA), Dummer RA 3545 (EA), Liebenberg 1704 (EA), Wood GHS 126 (EA). Native distribution range: E Tropical Africa (Mt Elgon).

## F29. ORCHIDACEAE

31 Genera, 114 species

***Aerangis luteoalba* Schltr.** – Habit: Epiphytic herb. Habitat: Moist shady forest, woodland, 1500–2330 m. Voucher: Gerh. Lindblom (S). Native distribution range: W Central & E Tropical Africa to Ethiopia.

***Aerangis thomsonii* Schltr.** – Habit: Epiphytic herb. Habitat: Upland Forest, woodland, forest, 1750–3000 m. Vouchers: Snowden JD 809 (EA), Major C & Lugard

EJ 468 (EA), (K), Tweedie 30 (K). Native distribution range: SW Ethiopia to E Tropical Africa.

***Aerangis ugandensis* Summerh.** – Habit: Epiphytic herb. Habitat: Forest trees, 1330–2300 m. Vouchers: Snowden JD 879 (K, NHMUK). Native distribution range: E DR Congo to Kenya.

***Angraecopsis gracillima* (Rolfe) Summerh.** – Habit: Epiphytic herb. Habitat: Woodland, evergreen forest, 1750–2250 m. Vouchers: Snowden JD 505 (EA), Snowden JD 202 (EA). Native distribution range: Uganda to Zambia.

[EX]***Angraecopsis tenerrima* Kraenzl.** – Habit: Epiphytic herb. Habitat: Woodland, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tanzania.

***Angraecum erectum* Summerh.** – Habit: sub-epiphytic herb. Habitat: Riverine Forest, 1350–2350 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: E Tropical Africa to Zambia.

***Angraecum sacciferum* Lindl.** – Habit: Epiphytic herb. Habitat: Shady Forest, 1650–2650 m. Vouchers: Irwin PH 178 (EA), Tweedie EM 463 (K), Rono et al. SAJIT-PR 0010 (EA, HIB). Native distribution range: São Tomé to Kenya and S Africa.

***Ansellia africana* Lindl.** – Habit: Herb. Habitat: Woodland, wooded grassland on rocks, tree roots, 1750–2350 m. Vouchers: Tweedie EM 12962 (EA), Snowden JD 942 (EA), Tweedie EM 553 (BR), Laan FM van der 1031 (WAG). Native distribution range: Tropical & S Africa.

[EX]***Arachnis flos-aeris* (L.) Rchb.f.** – Habit: Herb. Habitat: Moist forest, 1000 m. Voucher: Adamson J (6) (EA). Native distribution range: S Indo-China to W Malesia and Phillipines.

***Bonatea steudneri* T.Durand & Schinz** – Habit: Herb. Habitat: Moist forest on rocks, Bushland, 1700–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: NE Sudan to South Africa, SW Arabian Peninsula.

***Brachycorythis kalbreyeri* Rchb.f.** – Habit: Herb. Habitat: Riverine Forest, upland rain forest, 1800–2350 m. Voucher: Bush RZ 244 (EA). Native distribution range: W Tropical Africa to Kenya and Zambia.

***Brachycorythis ovata* Lindl.** – Habit: Herb. Habitat: Grassland, 1200–2550 m. Vouchers: Snowden JD 877 (EA, K). Native distribution range: Tropical & S Africa.

***Brachycorythis ovata* subsp. *schweinfurthii* (Rchb.f.) Summerh.** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie 8 (EA). Native distribution range: W Tropical Africa to Ethiopia and Tanzania.

***Brachycorythis pleistophylla* Rchb.f.** – Habit: Herb. Habitat: Grassland and edges of deciduous woodland, 2000–2700 m. Voucher: Chater-Jack 847 (EA). Native distribution range: Tropical & S Africa, Madagascar.

***Brachycorythis pubescens* Harv.** – Habit: Herb. Habitat: Upland grassland, woodland, 2000–2700 m. Vouchers: Tweedie EM 14 (K), Snowden JD 928 (AMES). Native distribution range: Tropical & S Africa.

***Bulbophyllum cochleatum* Lindl.** – Habit: Epiphytic herb. Habitat: Shady Forest, 1450–2400 m. Vouchers: Snowden JD 940 (EA), Tweedie 47 (EA). Native distribution range: Tropical Africa.

***Bulbophyllum intertextum* Lindl.** – Habit: Herb. Habitat: Moist and riverine forest, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa, Madagascar, Seychelles.

EX***Bulbophyllum josephi* var. *mahonii* (Rolfe) J.J.Verm.** – Habit: Epiphytic herb. Habitat: Montane forest, 850–2100 m. Voucher: Snowden JD 923 (EA). Native distribution range: W Tropical Africa to Malawi.

***Cynorkis anacamptoides* Kraenzl.** – Habit: herb. Habitat: Upland moorland, grassland, upland rain forest, 2250–3350 m. Vouchers: Irwin PH 247 (EA), Tweedie 69/58 (EA), Tweedie EM 1191 (K). Native distribution range: Tropical Africa.

***Cyrtorchis arcuata* Schltr.** – Habit: Epiphytic herb. Habitat: Woodland, wet savanna, open forest, 1750–3300 m. Vouchers: Symes YE 357 (EA), Chater-Jack 225 (EA), Major C & Lugard EJ 565 (EA), Rono et al. SAJIT-PR 0005 (EA, HIB). Native distribution range: Tropical & S Africa.

***Diaphananthe lorifolia* Summerh.** – Habit: Epiphytic herb. Habitat: Forest, 1830–2330 m. Vouchers: Snowden JD sn (NMHUK). Native distribution range: Ethiopia to Rwanda and Tanzania.

***Diaphananthe odoratissima* (Rchb.f.) P.J.Cribb & Carlsward** – Habit: Epiphytic herb. Habitat: Forest trees, 1500–2430 m. Vouchers: Tweedie 31 (EA), Chater-Jack 36 (EA), Laan, FM van der 1066 (WAG). Native distribution range: Tropical Africa.

***Diaphananthe sarcophylla* (Schltr. ex Prain) P.J.Cribb & Carlsward** – Habit: Epiphytic herb. Habitat: Montane Forest, 1500–2400 m. Vouchers: Snowden JD 880 (EA), Tweedie 559 (EA), Tweedie EM 482 (K). Native distribution range: Central & E Tropical Africa.

***Diaphananthe vesicata* (Lindl.) P.J.Cribb & Carlsward** – Habit: Epiphytic herb. Habitat: Montane moist forest, 350–2200 m. Voucher: Tweedie EM 2481 (K). Native distribution range: W Tropical Africa to Tanzania.

***Disa aconitoides* Sond.** – Habit: Herb. Habitat: Grassland, 2300–2500 m. Vouchers: Tweedie EM 12954 (EA), Chater-Jack 244 (EA), Tweedie 66/147 (EA), Major C & Lugard EJ 594 (EA). Native distribution range: Ethiopia to S Africa.

***Disa aconitoides* subsp. *concinna* (N.E.Br.) H.P.Linder** – Habit: Herb. Habitat: wet savanna, woodland, 1450–2850 m. Vouchers: Chater-Jack 244 (EA), Snowden JD 1086 (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Disa erubescens* Rendle** – Habit: Herb. Habitat: Upland grasslands, 1500–2850 m. Vouchers: Tweedie 66/148 (EA), Dale IR 3135 (AMES). Native distribution range: Tropical Africa.

***Disa hircicornis* Rchb.f.** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM 572 (K). Native distribution range: Tropical & S Africa.

***Disa scutellifera* A.Rich.** – Habit: Herb. Habitat: Damp grassland, grassy rocky slopes, 1800–2700 m. Voucher: Tweedie EM 12953 (EA). Native distribution range: NE & E Tropical Africa.

***Disa stairsii* Kraenzl.** – Habit: Herb. Habitat: Alpine grassland, moorland, rocky areas 3000–4200 m. Vouchers: Tweedie DR 5446 (EA), 3 (EA), Adamson J 464 (EA), Tweedie EM 1807A (K). Native distribution range: Congo to E Tropical Africa.

***Disa welwitschii* Rchb.f.** – Habit: Herb. Habitat: Damp grasslands, 1700–2000 m. Vouchers: Lindblom, S s.n. (K). Native distribution range: Tropical & S Africa.

***Disperis anthoceros* Rchb.f.** – Habit: Herb. Habitat: Evergreen forest, bamboo forests on ground litter, 1800–3000 m. Vouchers: Tweedie 560 (EA), Tweedie EM 2852(K). Native distribution range: Tropical & S Africa, Madagascar.

***Disperis dicerochila* Summerh.** – Habit: Herb. Habitat: Upland moist forest in leaf litter, mossy branches, rocks, 1650–2830 m. Voucher: Sellow, Miss (K). Native distribution range: Ethiopia to S Tropical Africa.

***Disperis kilimanjarica* Rendle** – Habit: Herb. Habitat: Dense shade forest on branches covered with moss and liverworts, 2300–3000 m. Vouchers: Tweedie 920 (EA, K). Native distribution range: Kenya to Zambia.

***Disperis reichenbachiana* Welw. ex Rchb.f.** – Habit: Herb. Habitat: Grassland, forest floor on leaf mould, rock crevices, 1500–2330 m. Vouchers: Tweedie DR 9 (EA), Rono et al. SAJIT-PR 0012 (EA, HIB). Native distribution range: Tropical Africa.

EX***Epidendrum ibaguense* Kunth** – Habit: Herb. Habitat: Forest, grassland, 1300–1750 m. Voucher: Webster MVB 9025 (EA). Native distribution range: Colombia to Trinidad and W Bolivia.

***Epipactis africana* Rendle** – Habit: Herb. Habitat: Riverbanks in forest, bamboo forest, 2330–3750 m. Vouchers: Irwin PH 149 (EA), Napper DM & Irwin D 1495 (EA), Mwangangi OM 426 (K), Tweedie EM 1091 (K, BR). Native distribution range: SW Ethiopia to N Mozambique.

***Epipogium roseum* Lindl.** – Habit: Herb. Habitat: Leaf mold in wet forest floor, 1300–2250 m. Vouchers: Tweedie (Icon). Native distribution range: Tropical Africa to SW Pacific.

***Eulophia cucullata* (Afzel. ex Sw.) Steud.** – Habit: Herb. Habitat: Grassland, 1750–2300 m. Vouchers: Webster MVB 9037 (EA), Chater-Jack 231 (EA), Tweedie 67/57 (EA), Major C & Lugard EJ 596 (EA), Tweedie EM 5 (K). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Eulophia eustachya* (Rchb.f.) Geerinck** – Habit: Herb. Habitat: Wet grassland, 1650–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Zimbabwe.

***Eulophia guineensis* Lindl.** – Habit: Herb. Habitat: Outcrop rock, woodland, 1800–2400 m. Vouchers: Tweedie 2586, 67/42 (EA), Tweedie DR 1 (EA), Chater-Jack 226 (EA). Native distribution range: Cape Verde, Tropical Africa to Botswana, Arabian Peninsula.

***Eulophia horsfallii* (Bateman) Summerh.** – Habit: Herb. Habitat: Open Forest, riverine, outcrop rock, 1500–2700 m. Vouchers: Snowden JD 816 (EA), Symes YE 629 (EA). Native distribution range: Tropical & S Africa.

***Eulophia latilabris* Summerh.** – Habit: Herb. Habitat: Seasonally wet grassland, 1300–1600 m. Voucher: Snowden JD 876 (EA). Native distribution range: Nigeria to Sudan and Botswana.

***Eulophia livingstoneana* (Rchb.f.) Summerh.** – Habit: Herb. Habitat: Grassland, 1500–2350 m. Vouchers: Chater-Jack 230 (EA), 3314 (EA). Native distribution range: Ethiopia to South Africa, Comoros, Madagascar.

***Eulophia mechowii* T.Durand & Schinz** – Habit: Herb. Habitat: Grassland, wooded grassland, 2000–2350 m. Voucher: Lugard 634 (EA). Native distribution range: Nigeria to W Ethiopia and S Africa.

***Eulophia montis-elgonis* Summerh.** – Habit: Herb. Habitat: Wet grassland among rocks, 2000–2350 m. Vouchers: Dale IR 3109 (EA), Irwin PH 285 (EA), Tweedie 91 (EA), Chater-Jack 275 (EA), Lugard EJ 663 (EA) (K). Native distribution range: S Sudan to Tanzania.

***Eulophia odontoglossa* Rchb.f.** – Habit: Herb. Habitat: Grassland, bushland, rocky areas, 1750–2350 m. Vouchers: Tweedie 620 (EA). Native distribution range: Tropical & S Africa.

***Eulophia orthoplectra* (Rchb.f.) Summerh.** – Habit: Herb. Habitat: Grassland, wooded grassland, swamp woodland, 1200–2350 m. Vouchers: Lugard 11 (EA), Gardner HM 2277 (EA), Chater-Jack 96 (EA). Native distribution range: Tropical Africa.

***Eulophia ruwenzoriensis* Rendle** – Habit: Herb. Habitat: Grassland, 1650–2530 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: E Tropical Africa to Zambia, E Bolivia to Brazil and NE Argentina.

***Eulophia streptopetala* Lindl.** – Habit: Herb. Habitat: Forest, bush, grassland, 1750–2250 m. Vouchers: Chater-Jack 87 (EA), 159 (EA), Tweedie DR 4 (EA), Tweedie 66/149 (EA). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula.

***Eulophia subulata* Rendle** – Habit: Herb. Habitat: Swamps, seasonally wet grassland, 1100–1700 m. Voucher: Human observation sn (EA). Native distribution range: E Tropical Africa to Angola.

***Habenaria altior* Rendle** – Habit: Herb. Habitat: Grassland, streams, forest, 2000–3700 m. Vouchers: Irwin PH 425 (EA), 429 (EA), Tweedie EM 727 (K), Tweedie 1266 (K). Native distribution range: E Tropical Africa.

***Habenaria attenuata* Hook.f.** – Habit: Herb. Habitat: Moist upland forest, moorland, 2400–4000 m. Voucher: Tweedie 360 (EA). Native distribution range: Ethiopia to Cameroon and Tanzania SW Arabian Peninsula.

***Habenaria bracteosa* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Mountain forest, 2500–4000 m. Voucher: Tweedie EM 537 (K). Native distribution range: Bioko to Ethiopia and Tanzania.

***Habenaria chirensis* Rchb.f.** – Habit: Herb. Habitat: Wet grassland, swamps, wet rocks outcrop, 1850–2300 m. Vouchers: Chater-Jack 302 (EA), Symes YE 395 (EA), Tweedie 66/145 (EA). Native distribution range: Nigeria to Ethiopia and Tanzania.

***Habenaria cornuta* Lindl.** – Habit: Herb. Habitat: Grassland, 1700–2700 m. Voucher: Tweedie EM 523 (K). Native distribution range: Tropical & S Africa.

***Habenaria decorata* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Rock outcrop, upland moor, 2200–3300 m. Voucher: Thomas AS 642 (EA). Native distribution range: Ethiopia to Uganda.

***Habenaria filicornis* Lindl.** – Habit: Herb. Habitat: Damp areas, grassland, woodland, 1200–2850 m. Vouchers: Tweedie 395(N19) (EA), Tweedie EM 321 (EA). Native distribution range: Tropical & S Africa.

***Habenaria hologlossa* Summerh.** – Habit: Herb. Habitat: Damp grassland, open bushland, 1750– 3300 m. Vouchers: Tweedie 469 (EA), Tweedie DR 201 (EA), 209 (EA), Tweedie EM 323 (EA), 324 (EA), 325 (EA). Native distribution range: Kenya, Malawi, Angola.

***Habenaria holubii* Rolfe** – Habit: Herb. Habitat: Wet grassland, streamside, 1200–2300 m. Voucher: Chater-Jack 301 A (EA). Native distribution range: Tropical Africa to Namibia.

***Habenaria huillensis* Rchb.f.** – Habit: Herb. Habitat: Grassland, 1200–2500 m. Vouchers: Irwin PH 224 (EA), Tweedie 67/228 (EA), Tweedie DR 10 (EA), Symes YE 164 (EA), Tweedie 2671 (EA). Native distribution range: Tropical Africa.

***Habenaria humilior* Rchb.f.** – Habit: Herb. Habitat: Grassland, 1200–2700 m. Vouchers: Symes 164 (EA), Rono et al. SAJIT-PR 0114 (EA, HIB). Native distribution range: Ethiopia to S Africa.

****Habenaria keniensis* Summerh.** – Habit: Herb. Habitat: Woodland, upland rainforest edges, 1950–2950 m. Vouchers: Tweedie in Bally 7619 (EA), Irwin PH 448 (EA), Tweedie 703 (EA), 387 (K), Tweedie EM 505a (K). Native distribution range: Kenya.

***Habenaria laurentii* De Wild.** – Habit: Herb. Habitat: Grassland, bushland, 1800–2100 m. Vouchers: Chater-Jack 310 (EA), 301B, Tweedie EM 630 (K). Native distribution range: Tropical Africa.

***Habenaria lindblomii* Schltr.** – Habit: Herb. Habitat: Grassland, 1800–2200 m. Vouchers: Tweedie 522 ,66 (K), Tweedie 2667 (EA), Tweedie EM 12951 (EA). Native distribution range: Kenya to S Tropical Africa.

***Habenaria macruroides* Summerh.** – Habit: Herb. Habitat: Grassland, swamps 1700–2000 m. Voucher: Tweedie 32 (EA). Native distribution range: W Central & E Tropical Africa.

***Habenaria malacophylla* Rchb.f.** – Habit: Herb. Habitat: Upland moist forest, grassland, forest, 1200–2700 m. Vouchers: Irwin PH 63 (EA), Tweedie 17 (EA). Native distribution range: Tropical & S Africa, S Arabian Peninsula.

***Habenaria microsaccus* Kraenzl.** – Habit: Herb. Habitat: Upland grassland, forest, 2100–3000 m. Vouchers: Tweedie EM 728 (K), 1725 (K). Native distribution range: Uganda to Burundi.

***Habenaria ndiana* Rendle** – Habit: Herb. Habitat: Forest, grassland, 1700–3000 m. Vouchers: Tweedie 404 (EA), Tweedie EM 471 (K). Native distribution range: E Tropical Africa to Malawi.

***Habenaria peristyloides* A.Rich.** – Habit: Herb. Habitat: Upland grassland, marshes, 2000–2850 m. Vouchers: Tweedie DR 11 (EA), Tweedie 67/189 (EA). Native distribution range: Nigeria to SW Arabian Peninsula.

***Habenaria petitiana* T.Durand & Schinz** – Habit: Herb. Habitat: Grassland, forest edges, 1700–3300 m. Vouchers: Lucas GLl & Williams JG 177 (EA), G. Ll. Lucas 177 (AMES). Native distribution range: Cameroon to Eritrea and S Africa.

***Habenaria quartiniana* A.Rich.** – Habit: Herb. Habitat: Upland grassland, thick bush, forest edge, 2100–2850 m. Vouchers: Tweedie EM 702 (K), Rono et al. SAJIT-PR 0133 (EA, HIB). Native distribution range: Eritrea to Uganda.

***Habenaria splendens* Rendle** – Habit: Herb. Habitat: Upland grassland, forest margin, 1700–2700 m. Vouchers: Tweedie (EA), Symes YE 628 (EA), Chater-Jack 300 (EA), Snowden JD 913 (AMES). Native distribution range: Ethiopia to Zambia.

***Habenaria tweedieae* Summerh.** – Habit: Herb. Habitat: Rock outcrop, woodland, 2200–2600 m. Vouchers: Irwin PH 524 (EA), Tweedie DR 55 (EA), 25 (EA), Tweedie EM 680 (K). Native distribution range: SW Ethiopia to Rwanda.

***Habenaria vaginata* A.Rich.** – Habit: Herb. Habitat: Damp grassland, forest edges, 1300–3000 m. Vouchers: Tweedie EM 12949 (EA), Tweedie 2672 (EA), Tweedie EM 507 (K). Native distribution range: Eritrea to Tanzania.

***Habenaria walleri* Rchb.f.** – Habit: Herb. Habitat: Swampy grassland, 1200–2300 m. Vouchers: Tweedie 12946 (EA), 66/121 (EA). Native distribution range: Tropical Africa.

***Holothrix aphylla* Rchb.f.** – Habit: Herb. Habitat: Upland grassland, forest, 1500–2600 m. Vouchers: Chater-Jack 253, 252 (EA). Native distribution range: Nigeria to Yemen.

*******Holothrix elgonensis* Summerh.** – Habit: Herb. Habitat: Upland grassland, forest, 3300–3900 m. Vouchers: Lugard 379 (EA), Tweedie 199 (EA), Thomas 2682 (EA), Tweedie DR 31, 109 (EA), Tweedie EM 359 (EA), Lugard EJ 379 (EA), Lugard EJ; Lugard C 379 (K), Lugard EJ; Lugard C 379a (K). Native distribution range: E Tropical Africa (Mt Elgon).

***Kylicanthe rohrii* (Rchb.f.) Descourv. & Farminhão** – Habit: Epiphytic herb. Habitat: Montane forest, 2100–3000 m. Vouchers: C Leaky 24 (EA), Tweedie 2015 (EA, K), Snowden JD 921 (NHMUK). Native distribution range: Tropical Africa.

***Liparis bowkeri* Harv.** – Habit: Herb. Habitat: Mossy banks, forest trees, 1350–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Africa.

***Liparis deistelii* Schltr.** – Habit: Herb. Habitat: Forest on mossy banks on tree and tree fern trunks, 1700–2750 m. Vouchers: Tweedie 506 (EA), Tweedie EM 457 (K), Synge PM 980 (EA, BR). Native distribution range: W Central & E Tropical Africa to W Ethiopia and Malawi.

**EX*Platanthera micrantha* Schltr.** – Habit: Herb. Habitat: Upland grassland, upland moor, 2500–3000 m. Voucher: Lankester 13 (EA). Native distribution range: Azores.

***Platycoryne crocea* Rolfe** – Habit: Herb. Habitat: Grassland, 1300–2600 m. Vouchers: Dale IR 3137 (EA), Chater-Jack 255 (EA), Tweedie EM 12963 (EA), Symes YE 355 (EA), Major C & Lugard EJ 647 (EA), Tweedie 66/102 (EA). Native distribution range: Cameroon to Ethiopia and Zimbabwe.

***Polystachya adansoniae* Rchb.f.** – Habit: Epiphytic herb. Habitat: Forest, woodland, 1650–2330 m. Vouchers: Tweedie 172 (EA), Chater-Jack 4818 (EA), Tweedie EM 12945 (EA). Native distribution range: Tropical Africa.

***Polystachya bella* Summerh.** – Habit: Epiphytic herb. Habitat: Forest trees, 1800–2350 m. Vouchers: Bush RZ 245 (EA). Native distribution range: SW Kenya.

***Polystachya bennettiana* Rchb.f.** – Habit: Epiphytic herb. Habitat: wet savanna, woodland, dry forest, 1750–2400 m. Vouchers: Yohana 2523 (EA), Chater-Jack 215 (EA). Native distribution range: Ivory Coast to Eritrea and Zambia.

***Polystachya bicarinata* Rendle** – Habit: Epiphytic herb. Habitat: Upland riverine forest, 1800–2830 m. Vouchers: Snowden JD 960 (EA, MO), Tisdall 313 (MO), Rono et al. SAJIT-PR 0034 (EA, HIB). Native distribution range: E Central & E Tropical Africa.

***Polystachya caespitifica* Kraenzl. ex Engl.** – Habit: Epiphytic herb. Habitat: Forest, 1800–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to Zimbabwe.

***Polystachya campyloglossa* Rolfe** – Habit: Epiphytic herb. Habitat: Dry Forest, 1700–3000 m. Voucher: Tweedie EM 1085 (K). Native distribution range: E Tropical Africa to E Zimbabwe.

***Polystachya cultriformis* Lindl. ex Spreng.** – Habit: Epiphytic herb. Habitat: Forest near rivers, 330–2700 m. Vouchers: Tweedie DR 7 (EA), Bamps PRJ sn (EA), Tweedie EM 556 (K). Native distribution range: Bioko to Ethiopia and S Africa, W Indian Ocean.

***Polystachya eurychila* Summerh.** – Habit: Epiphytic herb. Habitat: Dry forest, 1830–2300 m. Vouchers: Tweedie EM 555 (K), Eggeling WJ 2438 (K), Eggeling WJ 2438 (K, US), Meyer, H. 291 (K), Dummer RA 3679 (K). Native distribution range: Ethiopia to NW Kenya.

***Polystachya lindblomii* Schltr.** – Habit: Epiphytic herb. Habitat: Forest, 1000–2330 m. Vouchers: Tweedie EM 470 (K), Rono et al. SAJIT-PR 0009 (EA, HIB). Native distribution range: SW Ethiopia to S Tropical Africa.

***Polystachya simplex* Rendle** – Habit: Epiphytic herb. Habitat: Dry montane forest, 2000–2350 m. Vouchers: Snowden JD 875 (EA), Tweedie DR 81 (EA). Native distribution range: SW Ethiopia to E Zimbabwe.

***Polystachya spatella* Kraenzl.** – Habit: Epiphytic herb. Habitat: Forest, 1600–2830 m. Vouchers: Tweedie 315, Major C & Lugard EJ 640 (EA), Bamps PRJ sn (EA), Tweedie EM 447 (K). Native distribution range: E Central & E Tropical Africa.

***Polystachya steudneri* Rchb.f.** – Habit: Epiphytic herb. Habitat: Dry forest, 1850–2500 m. Vouchers: Lugard 504 (EA), Snowden JD 959 (EA), Jack C 401 (EA). Native distribution range: Nigeria to Eritrea and Burundi.

***Polystachya tenuissima* Kraenzl.** – Habit: Epiphytic herb. Habitat: Upland forest, 1700–2500 m. Vouchers: Bush RZ 246 (EA), Hedberg O 303 (EA), Tweedie 2634 (EA), Tweedie DR 6 (EA), Tweedie EM 448 (K). Native distribution range: W Tropical Africa to Uganda and N Tanzania.

***Polystachya transvaalensis* Schltr.** – Habit: Epiphytic herb. Habitat: Upland forest, 1650–3350 m. Vouchers: Tweedie DR 20 (EA), sn (EA). Native distribution range: South Sudan and S Africa.

***Porpax repens* (Rolfe) Schuit., Y.P.Ng & H.A.Pedersen** – Habit: Herb. Habitat: Riverine forest, 1950–2830 m. Vouchers: Tweedie EM 1066 (K). Native distribution range: Tropical Africa.

***Rangaeris muscicola* (Rchb.f.) Summerh.** – Habit: Epiphytic herb. Habitat: Evergreen forest, woodland, 1700–2350 m. Vouchers: Snowden JD 25 (EA), Major C & Lugard EJ 645 (EA), Chater-Jack 222 (EA). Native distribution range: Tropical & S Africa.

***Rhipidoglossum brachyceras* (Summerh.) Farminhão & Stévart** – Habit: Epiphytic herb. Habitat: Forest, 1700–2000 m. Vouchers: Dummer RA 3686 (EA), Snowden JD 900 (EA, NMHUK). Native distribution range: Tropical Africa.

***Rhipidoglossum pulchellum* (Summerh.) Garay** – Habit: Epiphytic herb. Habitat: Dry forest, 1500–2330 m. Vouchers: Tweedie EM 571, 570A (K). Native distribution range: Central & E Tropical Africa.

***Rhipidoglossum subsimplex* (Summerh.) Garay** – Habit: Epiphytic herb. Habitat: Forest, 1850–2850 m. Voucher: Rono et al. SAJIT-PR 0063 (EA, HIB). Native distribution range: E & S Tropical Africa.

***Satyrium carsonii* Rolfe** – Habit: Herb. Habitat: Open grasslands, woodland, 1450–2330 m. Vouchers: Tweedie 161 (EA), Tweedie DR 8 (EA), Webster MVB 9031 (EA). Native distribution range: Nigeria to Kenya and Zambia.

***Satyrium coriophoroides* A.Rich.** – Habit: Herb. Habitat: Grassland, rocky slopes, 1700–2800 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Ethiopia and S Tropical Africa.

***Satyrium crassicaule* Rendle** – Habit: Herb. Habitat: Wet grassland, 1850–3300 m. Vouchers: Snowden JD 922 (EA), Major C & Lugard EJ 424 (EA), Synge PM 820 (WAG), Rono et al. SAJIT-PR 0258 (EA, HIB). Native distribution range: Nigeria to Ethiopia and Zambia.

[EX]***Satyrium neglectum* subsp. *woodii* (Schltr.) A.V.Hall** – Habit: Herb. Habitat: Upland grassland, 2150–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: South Africa.

***Satyrium robustum* Schltr.** – Habit: Herb. Habitat: Swampy grasslands, bog near streams, 1350–3000 m. Vouchers: Tweedie EM 810 (EA, K, UPS), Bickford N 14 (EA), Tweedie EM 837 (EA), Hedberg O 171 (EA). Native distribution range: E Tropical Africa.

***Satyrium sceptrum* Schltr.** – Habit: Herb. Habitat: upland grassland, and open bushland, upper forest edge in damp places, 1500–2700 m. Voucher: Tylor in Tweedie 624 (2) (EA). Native distribution range: South Sudan to S Tropical Africa.

***Satyrium volkensii* Schltr.** – Habit: Herb. Habitat: Upland grassland, open woodland, bushland, 2200–2700 m. Vouchers: Chater-Jack 245 in CM 4816 (EA), 246 (EA), Tweedie EM 12957 (EA), Major C & Lugard EJ 595 (EA). Native distribution range: Nigeria to Kenya and Zimbabwe.

***Sphyrarhynchus amaniense* (Summerh.) Bytebier** – Habit: Epiphytic herb. Habitat: Shady montane forest, 1600–2300 m. Vouchers: Tweedie 603 (EA), Carroll, EW (K). Native distribution range: Kenya to S Tropical Africa.

***Tridactyle bicaudata* Schltr.** – Habit: Epiphytic herb. Habitat: Dry forests, riverine forest, 0–2500 m. Vouchers: Blancowe J sn (EA), Chater-Jack 104 (EA). Native distribution range: Tropical & S Africa.

***Tridactyle scottellii* Schltr.** – Habit: Epiphytic herb. Habitat: Evergreen riverine forest, 2000–3000 m. Vouchers: Snowden JD 903 (EA), Tweedie 88 (EA), Rono et al. SAJIT-PR 0106 (EA, HIB). Native distribution range: Gabon to Kenya.

***Tridactyle tridactylites* Schltr.** – Habit: Epiphytic herb. Habitat: Montane rain forest, 1000–1800 m. Voucher: Snowden JD 525 (EA). Native distribution range: Tropical Africa.

***Ypsilopus amaniensis* (Kraenzl.) D'haijère & Stévart** – Habit: Epiphytic herb. Habitat: Dry forest, open woodland 1500–2350 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: S Ethiopia to Zimbabwe.

## F30. POACEAE

50 Genera, 98 species

***Adenochloa hymeniochila* (Nees) Zuloaga** – Habit: Herb. Habitat: River margins, moist meadows, 1000–3000 m. Vouchers: Snowden JD 118 (US, MO, K). Native distribution range: Tropical & S Africa, Madagascar.

***Agrostis gracilifolia* C.E.Hubb.** – Habit: Herb. Habitat: Moorland, highland grasses, 2800–4300 m. Vouchers: Hedberg 192 (EA), Bogdan 3934 (EA), Thomas AS 2671 (EA), Dummer RA (B) 3339, 3475 (US), Liebenberg LCC 1689 (K), Johnston HB 876 (K), Taylor Dr G 3709 (K). Native distribution range: Ethiopia to Tanzania.

***Agrostis keniensis* Pilg.** – Habit: Herb. Habitat: Upland forest edges, wet upland grassland, 2300–3000 m. Voucher: Tothill BH 2262 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Agrostis kilimandscharica* Mez** – Habit: Herb. Habitat: Bamboo, forest clearing, upland grassland, 2100–3700 m. Vouchers: Bodgan A 3930 (EA), Thomas AS 2718 (EA), Taylor G 3703 (K), Johnston HB 876 (K), Liebenberg LCC 1689 (K), Hedberg KO 4461 (BR), Dummer RA 3569 (US). Native distribution range: Congo to Ethiopia and Tanzania.

***Agrostis producta* Pilg.** – Habit: Herb. Habitat: Forest edges, wet upland grassland, 2400–3800 m. Voucher: Thomas AS 2685, 2712 (EA). Native distribution range: South Sudan to Zimbabwe.

***Agrostis quinqueseta* (Steud.) Hochst.** – Habit: Herb. Habitat: Moorland, alpine heath, 3000–4000 m. Vouchers: Knight J 4501 (K), Ekkens DB 630 (EA), Bogdan A 3931 (EA). Native distribution range: Cameroon to Ethiopia and Tanzania.

***Agrostis volkensii* Stapf** – Habit: Herb. Habitat: Forest edges, wet upland grassland, 3000–4300 m. Voucher: Dummer RA 3339A (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Aira caryophyllea* L.** – Habit: Herb. Habitat: Grassland, moorland, 2100–4300 m. Vouchers: Dummer RA 3367 (EA), Bogdan 3399 (EA), Bogdan A 3941, 3945 (EA). Native distribution range: Macaronesia, Mediterranean to African Mountains, Europe to Caucasus, Tibet to W Himalaya.

***Andropogon amethystinus* Steud.** – Habit: Herb. Habitat: Alpine grasslands, montane grassland, moorland, 2000–4000 m. Vouchers: Bogdan A 4136 (EA), Liebenberg L 1686 (US). Native distribution range: Tropical & S Africa, Arabian Peninsula, S India, Myanmar.

***Andropogon lima* Stapf** – Habit: Herb. Habitat: Montane grassland, dry moorland, 2400–4000 m. Vouchers: Katende T 911 (MO), Hedberg 260, Bie SW 275 (EA), Osterkamp M 111 (EA), Bogdan A 4497 (EA), Melderis 260 (EA), Hedberg O 869 (EA). Native distribution range: Cameroon, South Sudan to Malawi.

***Anthoxanthum nivale* K.Schum.** – Habit: Herb. Habitat: Grassland, moorland, 2400–4800 m. Vouchers: Bogdan 3927 (K), 4494 (K), Liebenberg L 1701 (US), Hedberg O 191 (K). Native distribution range: NE DR Congo to E Tropical Africa.

***Arthraxon hispidus* (Thunb.) Makino** – Habit: Herb. Habitat: Grassland, woodland, 650–2600 m. Voucher: Snowden JD 1209 (US). Native distribution range: Tropical Africa, W Indian Ocean, Asia to E Australia.

***Arthraxon prionodes* (Steud.) Dandy** – Habit: Herb. Habitat: Rocky slopes, 1000–2000 m. Voucher: Human observation sn (EA). Native distribution range: NE & E Tropical Africa, Arabian Peninsula, Afghanistan to China and Peninsula Malaysia.

***Avenella flexuosa* (L.) Drejer** – Habit: Herb. Habitat: Upland moorland, 2600–4300 m. Vouchers: Bogdan3950 (EA), Hedberg O 931 (K). Native distribution range: Europe to Japan and Malesian Mountains, Macaronesia, NW & Tropical Montane Africa, Greenland to Central & E America, S South America to Falkland Islands.

***Brachypodium flexum* Nees** – Habit: Herb. Habitat: Upland Forest shade, bamboo thickets, bushland, 2000–3000 m. Voucher: Bogdan 5389 (EA). Native distribution range: Tropical & S Africa, Madagascar.

[EX]***Briza maxima* L.** – Habit: Herb. Habitat: Roadsides, cultivations, 2400–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Macaronesia to Mediterranean.

***Bromus leptoclados* Nees** – Habit: Herb. Habitat: Upland forest edge, grassland, 2300–4300 m. Vouchers: Bogdan A 4121 (K), 5391 (K), 5408 (K), Wesche K 1977 (K), Mwangangi OM 351 (K), Johnston HB 859 (BR), Hedberg O 223 (K), Dummer RA 3342 (US). Native distribution range: Cameroon to Eritrea and S Africa, SW Arabian Peninsula.

***Cenchrus geniculatus* Thunb.** – Habit: Herb. Habitat: Upland pastures, old cultivation, roadsides, 1500–3500 m. Voucher: Snowden JD 1181 (K). Native distribution range: Nigeria to Eritrea and S Africa, SW Arabian Peninsula.

***Cenchrus riparius* (Hochst. ex A.Rich.) Morrone** – Habit: Herb. Habitat: Swamps, cultivation, 1400–2600 m. Vouchers: Snowden JD 1214 (EA), 1227 (EA, K). Native distribution range: Ethiopia to E Tropical Africa.

***Cenchrus trisetus* (Leeke) Morrone** – Habit: Herb. Habitat: Evergreen forest, 1000–2800 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Zimbabwe.

***Cenchrus unisetus* (Nees) Morrone** – Habit: Herb. Habitat: Bushland, wooded grassland, 300–2300 m. Vouchers: Snowden JD 1244 (EA, S), Maitland 1179 (EA). Native distribution range: Tropical & S Africa, Arabian Peninsula.

****Colpodium hedbergii* (Melderis) Tzvelev** – Habit: Herb. Habitat: Upland moor, stream sides, 3580–4000 m. Vouchers: Hedberg O 908 (MO, S, K, UPS). Native distribution range: Ethiopia, Kenya.

***Crinipes longifolius* C.E.Hubb.** – Habit: Herb. Habitat: Wet grassland, forest edges, 1869–2400 m. Vouchers: Dummer RA 3643 (EA), Thomas AS 296 (EA, MO), 2572 (EA). Native distribution range: Ethiopia, South Sudan to Uganda.

***Cymbopogon giganteus* Chiov.** – Habit: Herb. Habitat: Bushland, wooded grassland, 0–2300 m. Vouchers: Snowden JD 1246 (EA), Maitland 1179 (EA). Native distribution range: Tropical Africa to Botswana, Madagascar.

***Cynodon nlemfuensis* Vanderyst** – Habit: Herb. Habitat: Wet grasslands, 300–2300 m. Vouchers: Snowden JD 1218 (EA), Forbes LM 214 (EA). Native distribution range: Ethiopia to S Tropical Africa.

EX***Cynodon transvaalensis* Burtt Davy** – Habit: Herb. Habitat: Weedy places, roadside, 1500–2600 m. Voucher: Snowden JD 1212 (EA). Native distribution range: S Africa.

****Deschampsia angusta* Stapf & C.E.Hubb.** – Habit: Herb. Habitat: Streams in moorland, 3600–4300 m. Voucher: Bogdan 3937 (EA). Native distribution range: E Central Tropical Africa (Ruwenzori, Mt Elgon).

***Deschampsia cespitosa* (L.) P.Beauv.** – Habit: Herb. Habitat: Moorland, streambanks, 2900–4000 m. Voucher: Hedberg 860 (EA). Native distribution range: Subarctic & Temperate to Tropical Mountains.

***Digitaria abyssinica* (Hochst. ex A.Rich.) Stapf** – Habit: Herb. Habitat: Roadside, grassland, grazing land, 0–3000 m. Vouchers: Snowden JD 1232 (K), 1022 (US). Native distribution range: Tropical & S Africa to Sri Lanka, Vietnam, Peninsula Malaysia, New Guinea, SE Queensland.

***Echinochloa pyramidalis* Hitchc. & Chase** – Habit: Herb. Habitat: Swamps, riverside, 0–2400 m. Voucher: Snowden JD 1092 (US). Native distribution range: Africa to Arabian Peninsula.

***Eleusine africana* Kenn.-O'Byrne** – Habit: Herb. Habitat: Upland grassland, in cultivation, 1300 m. Voucher: Dummer RA 3655 (US). Native distribution range: Africa to Arabian Peninsula.

EX***Eleusine coracana* Gaertn.** – Habit: Herb. Habitat: Upland grassland, in cultivation. Voucher: Snowden JD 1235, 1236 (US). Native distribution range: W Tropical Africa to Socotra and Angola.

***Eleusine indica* (L.) Gaertn.** – Habit: Herb. Habitat: Wet grassland, forest edges, 0–2070 m. Vouchers: Snowden JD 1110 (EA, US). Native distribution range: Tropical & Subtropical Old World.

**Eleusine jaegeri* **Pilg.** – Habit: Herb. Habitat: Upland grassland, forest clearings, bushland, 1800–3300 m. Vouchers: Dummer RA 3655 (MO), Wesche K 1555 (MO). Native distribution range: Ethiopia to E Tropical Africa.

***Elionurus muticus* (Spreng.) Kuntze** – Habit: Herb. Habitat: Open bushland, 1400–2800 m. Vouchers: Snowden JD 1260 (EA, US). Native distribution range: S Tropical America, Tropical & S Africa, SW Arabian Peninsula.

***Eragrostis exasperata* Peter** – Habit: Herb. Habitat: Moist grassland, rock outcrop, 300–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to S Tropical Africa.

***Eragrostis heteromera* Stapf** – Habit: Herb. Habitat: Roadsides, old cultivations, water logged soils, 1200–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa.

***Eragrostis hispida* K.Schum.** – Habit: Herb. Habitat: Swampy places, rock outcrop seepage, 1000–2600 m. Vouchers: Hemp A (W), Rono et al. SAJIT-PR 0019 (EA, HIB). Native distribution range: South Sudan to S Tropical Africa.

***Eragrostis paniciformis* (A.Braun) Steud.** – Habit: Herb. Habitat: Upland grassland, streamsides, swamp grassland, 1300–2600 m. Vouchers: Lugard EJ & Lugard C 604 (BR, US). Native distribution range: Eritrea to Zambia.

***Eragrostis racemosa* Steud.** – Habit: Herb. Habitat: Dry grassland, 1200–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa, Seychelles, Madagascar.

***Eragrostis schweinfurthii* Chiov.** – Habit: Herb. Habitat: Grassland, 1300–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Malawi, SW Arabian Peninsula, Sri Lanka.

***Eriochloa barbatus* (Trin.) S.Yadav & M.R.Almeida** – Habit: Herb. Habitat: Depressions in swampy areas, 0–1800 m. Voucher: Human observation sn (EA). Native distribution range: Tropical & S Africa, Madagascar, Arabian Peninsula.

***Exotheca abyssinica* Andersson** – Habit: Herb. Habitat: Upland, montane grassland, 2000–4000 m. Vouchers: Hedberg 128 (EA), Mwangangi OM 355 (EA), Stein W Bie (UPS). Native distribution range: Eritrea to S Tropical Africa, Indo-China.

***Festuca abyssinica* Hochst.** – Habit: Herb. Habitat: Grassland, forest edges, moor, 2800–4300 m. Vouchers: Dale JRD (EA), Wilson J 1227 (K), A Thomas Th644 (US). Native distribution range: Gulf of Guinea Islands to Cameroon, Ethiopia to S Tropical Africa.

***Festuca bromoides* L.** – Habit: Herb. Habitat: Wet grassland, forest edges, 2300–3900 m. Voucher: Dummer RA 3778 (EA). Native distribution range: Macaronesia, Europe to Caucasus, Sahara to Kenya, SW Cameroon, SW Arabian Peninsula.

[EX]***Festuca camusiana* St.-Yves** – Habit: Herb. Habitat: Upland forest, bamboo tickets, 2100–3500 m. Vouchers: Bogdan 5386 (EA), Dummer RA 3506 (EA). Native distribution range: Madagascar.

***Festuca chodatiana* (St.-Yves) E.B.Alexeev** – Habit: Herb. Habitat: Forest edge, grassland, bamboo thickets, 2100–3500 m. Voucher: Bogdan 5386 (EA). Native distribution range: Gulf of Guinea Islands, SW Cameroon, South Sudan (Imatong Mountains), Central Ethiopia to E Tropical Africa.

****Festuca claytonii E.B.Alexeev** – Habit: Herb. Habitat: Moorland of Elgon, above 2500 m. Voucher: Thomas SA 2727 (K). Native distribution range: Kenya.

***Festuca mekiste* Clayton** – Habit: Herb. Habitat: upland forest, 2300–3000 m. Voucher: Bogdan 5390 (EA). Native distribution range: Bioko, SW Cameroon, Ethiopia.

***Festuca obturbans* St.-Yves** – Habit: Herb. Habitat: Upland moor, 2400–4000 m. Voucher: Mwangangi OM 312 (EA). Native distribution range: Kenya to Tanzania, Yemen.

***Festuca pilgeri St.-Yves** – Habit: Herb. Habitat: Dry upland moor, 2700–4250 m. Vouchers: Liebenberg 1699 (EA), Thomas AS 2729 (EA), Bogdan A 3942 (K, MO), Wesche K 257 (K, MO), Hedberg KO 1006 (EA, MO), HB Johnston 870 (US). Native distribution range: E Tropical Africa (Mountains).

***Festuca simensis* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Upland Forest shade, bamboo thickets, 2000–3300 m. Voucher: Bogdan 5402 (EA). Native distribution range: Cameroon to Ethiopia and N Tanzania.

***Hyparrhenia cymbaria* Stapf** – Habit: Herb. Habitat: Wooded grassland, forest, 1000–3000 m. Voucher: Snowden JD 1217, 1162 (US). Native distribution range: Nigeria to Eritrea and S Africa, Comoros, Madagascar, India.

***Hyparrhenia dregeana* Stapf ex Stent** – Habit: Herb. Habitat: Grazed grasslands, 2000–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula.

***Hyparrhenia mobukensis* Chiov.** – Habit: Herb. Habitat: Subalpine forest, bamboo zone, 2500–3300 m. Vouchers: Dummer RA 3498 (EA), Thomas AS 2664 (EA, MO). Native distribution range: Ethiopia to S Tropical Africa.

***Hyparrhenia rufa* Stapf** – Habit: Herb. Habitat: Bushlands, wooded grasslands, 0–2300 m. Voucher: Snowden JD 1029, 1102 (US). Native distribution range: Tropical & S Africa, W Indian Ocean, S Central China to Indo-China.

***Hyparrhenia schimperi* Andersson** – Habit: Herb. Habitat: Open moist bushland, wooded grassland, 700–1700 m. Vouchers: Snowden JD 1168 (EA). Native distribution range: Ethiopia to S Africa, Madagascar.

***Hyperthelia dissoluta* (Nees) Clayton** – Habit: Herb. Habitat: Bushland, wooded grassland, 0–2400 m. Voucher: Snowden JD 1173 (US). Native distribution range: Tropical & S Africa, Madagascar.

***Koeleria capensis* Nees** – Habit: Herb. Habitat: Upland grassland, moorland, 1800–4300 m. Vouchers: Liebenberg 1696 (EA), Tothill BH 2434 (EA), Granvik H (S), A Bogdan AB 3947 (US), Dummer RA 3341 (US). Native distribution range: Cameroon, Ethiopia to S Africa, SW Arabian Peninsula.

***Koordersiochloa longiarista* (A.Rich.) Veldkamp** – Habit: Herb. Habitat: Forest floor, heath zone, bamboo clearing, 1500–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Ethiopia and S Africa, Jawa to Lesser Sunda Islands, Philippines.

***Loudetia simplex* (Nees) C.E.Hubb.** – Habit: Herb. Habitat: Rocky dry woodland, wooded grassland, 1000–2600 m. Vouchers: Snowden JD 1242 (US), Hemp A (W). Native distribution range: Tropical & S Africa, Madagascar.

***Melinis repens* (Willd.) Zizka** – Habit: Herb. Habitat: Rocky grassland, 0–2500 m. Vouchers: Snowden JD 1090 (US, MO). Native distribution range: Africa to Arabian Peninsula.

***Micrachne patentiflora* (Stent & J.M.Rattray) P.M.Peterson** – Habit: Herb. Habitat: Seasonally flooded shallow soils, 1400–2300 m. Voucher: Bogdan 4075 (BR, EA). Native distribution range: Kenya to Botswana.

***Microchloa indica* (L.f.) P.Beauv.** – Habit: Herb. Habitat: Upland grassland, bushland, 800–1600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World to N Australia.

***Moorochloa eruciformis* (Sm.) Veldkamp** – Habit: Herb. Habitat: Wet grassland, 500–2200 m. Voucher: Strange R 70 (EA). Native distribution range: Mediterranean to Indo-China and Africa.

***Oldeania alpina* (K.Schum.) Stapleton** – Habit: Herb (bamboo). Habitat: Montane forest, 2400–3000 m. Vouchers: Dummer RA 3508 (EA, US), Eggeling W 2472 (EA, US). Native distribution range: Ethiopia to Zambia.

***Oplismenus hirtellus* (L.) P.Beauv.** – Habit: Herb. Habitat: Evergreen Forest, 0–2500 m. Vouchers: Snowden JD 1213 (EA, S) 1230 (US). Native distribution range: Tropics & Subtropics.

***Oxytenanthera abyssinica* Munro** – Habit: Herb (bamboo). Habitat: Grassland, woodland, thickets, 2400–3000 m. Voucher: Snowden JD 1051 (K, US). Native distribution range: Tropical & S Africa.

***Panicum chionachne* Mez** – Habit: Herb. Habitat: Forest, 1000–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: South Sudan to S Tropical Africa.

***Panicum hochstetteri* Steud.** – Habit: Herb. Habitat: Forest, 1600–3300 m. Vouchers: Thomas AS 2665 (EA), Dummer RA 3567 (EA, US). Native distribution range: Sierra Leone to Eritrea and Tanzania.

***Panicum monticola* Hook.f.** – Habit: Herb. Habitat: Forest shade, 600–2800 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Ethiopia and South Africa.

***Panicum pusillum* Hook.f.** – Habit: Herb. Habitat: Forest, grassland, bushland, 1350–3000 m. Voucher: Dummer RA 3551 (EA). Native distribution range: Tropical Africa.

***Pentameris borussica* (K.Schum.) Galley & H.P.Linder** – Habit: Herb. Habitat: Upland grassland, moorland, 3000–4680 m. Vouchers: Dummer RA 3379 (EA), Thomas AS 2686 (EA), Wesche K 238 (K), 237 (K), Thomas AS 2686 (K), Bogdan A 3939 (K), Nouga 133 (K), Lisowski S 10468 ((BR), Katende 878 (K). Native distribution range: Ethiopia to E Tropical Africa.

***Pentameris minor* (F.Ballard & C.E.Hubb.) Galley & H.P.Linder** – Habit: Herb. Habitat: Moorland, open grassland, moorland, 3000–4800 m. Voucher: Bodgan 4499 (EA), Bogdan A 3946, AB3940, AB4123 (K), Thomas AS 2721 (K, UPS), Hedberg O 4487 (K), Lisowski S 10468 (K), Dale IR 3189 (K), Mwangangi OM 314 (K), Knight J 4499 (K). Native distribution range: Ethiopia to E Tropical Africa.

***Pentameris pictigluma* (Steud.) Galley & H.P.Linder** – Habit: Herb. Habitat: Upland grassland, montane path side, 2600–4300 m. Vouchers: Wood GH 160 (EA), Wesche K 316 (K), 310 (K). Native distribution range: Cameroon, Ethiopia to Tanzania, Yemen.

***Poa annua* L.** – Habit: Herb. Habitat: Upland path sides, 2000–3550 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Temperate Old World to Tropical Mountains.

***Poa leptoclada* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Forest edges, upland grassland, heath, moor, 1800–4300 m. Vouchers: Hedberg O 1028 (NHMUK), Dummer RA 3524 (US), Liebenberg L 1697 (US). Native distribution range: Bioko to Eritrea and S Africa, Arabian Peninsula.

***Poa schimperiana* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Stream sides, moorland, 2300–4300 m. Vouchers: Bogdan A 3933 (BR), (K), Wesche K 1335 (K), Liebenberg L 1698 (S). Native distribution range: Nigeria to Ethiopia and Malawi, Arabian Peninsula.

***Poecilostachys oplismenoides* (Hack.) Clayton** – Habit: Herb. Habitat: Shady forest, 1000–2500 m. Vouchers: Katende AB; Sheil 2290 (K). Native distribution range: Nigeria to Kenya and S Tropical Africa.

***Polypogon schimperianus* (Hochst. ex Steud.) Cope** – Habit: Herb. Habitat: Upland grassland, moorland, 1500–4000 m. Voucher: Hedberg 3580 (EA). Native distribution range: Ethiopia to S Tropical Africa, Arabian Peninsula.

***Pseudechinolaena polystachya* (Kunth) Stapf in Prain** – Habit: Herb. Habitat: Upland forest shade, 1000–2500 m. Voucher: Snowden JD 1183 (EA). Native distribution range: Tropics & Subtropics.

***Pseudobromus africanus* Stapf** – Habit: Herb. Habitat: Bamboo thickets, upland forest, 2100–2700 m. Voucher: Bodgan 2832 (EA). Native distribution range: Sudan to S Africa.

***Setaria sphacelata* Stapf & C.E.Hubb. ex M.B.Moss** – Habit: Herb. Habitat: Wooded grasslands, swamps, riversides, 0–3300 m. Vouchers: Snowden JD 1103 (US, K), 1194 (US). Native distribution range: Tropical & S Africa, Madagascar.

***Sporobolus nervosus* Hochst.** – Habit: Herb. Habitat: Grazed bushland, 300–1830 m. Voucher: Human observation sn (EA). Native distribution range: Mauritania, Ethiopia to Tanzania, S Africa, Arabian Peninsula, Pakistan.

***Sporobolus olivaceus* Napper** – Habit: Herb. Habitat: Grassland, moorland, 2300–4000 m. Vouchers: Bogdan 3948, Dale in FD 3190 (EA), Liebenberg 1717 (EA). Native distribution range: Ethiopia to Zambia.

***Sporobolus paniculatus* T.Durand & Schinz** – Habit: Herb. Habitat: Roadsides, bushland, wooded grassland, 1000–2000 m. Voucher: Snowden JD 1239 (EA, US). Native distribution range: Tropical & S Africa, Madagascar.

***Sporobolus pyramidalis* P.Beauv.** – Habit: Herb. Habitat: Disturbed grassland, 2000–3000 m. Voucher: Snowden JD 1097 (US). Native distribution range: Tropical & Subtropical America, Africa to Arabian Peninsula.

**Sporobolus scitulus* **Clayton** – Habit: Herb. Habitat: Rare in swampy rock outcrop, at 2500 m. Voucher: Bogdan A AB 4072 (K). Native distribution range: Uganda to Kenya.

***Sporobolus stapfianus* Gand.** – Habit: Herb. Habitat: Bushlands, 500–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Niger to Ethiopia and S Africa, Madagascar.

EX***Stipa dregeana* Steud.** – Habit: Herb. Habitat: Upland forest shade, roadside, 2000–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: South Africa.

***Themeda triandra* Forssk.** – Habit: Herb. Habitat: Grassland, 0–3000 m. Voucher: Hedberg O 1060 (S, EA), Tweedie 21 (EA), Snowden JD 1220, 1171 (US). Native distribution range: Africa, Tropical & Subtropical Asia to Australia.

***Tripogon major* Hook.f.** – Habit: Herb. Habitat: Upland rocky grassland, 1200–3700 m. Vouchers: Snowden JD 1187 (K), Bodgan 3932 (US, EA), 5419 (EA), Rono et al. SAJIT-PR 0111 (EA, HIB). Native distribution range: Sierra Leone, Nigeria to Ethiopia and Malawi, S India.

***Trisetopsis angusta* (C.E.Hubb.) Röser & A.Wölk** – Habit: Herb. Habitat: Upland grassland, 2300–2600 m. Voucher: Bogdan A (B). Native distribution range: Kenya, Yemen.

***Trisetopsis milanjiana* (Rendle) Röser & A.Wölk** – Habit: Herb. Habitat: Upland forest egde, bamboo thickets, 2300–3500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Malawi, Madagascar.

***Trisetopsis umbrosa* (Hochst. ex Steud.) Röser & A.Wölk** – Habit: Herb. Habitat: Upland bamboo thickets, grassland, moor, 1850–4000 m. Vouchers: Bogdan 3929 (EA), 3936 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Urochloa brizantha* (A.Rich.) R.D.Webster** – Habit: Herb. Habitat: Grassland, wooded grassland, woodland, 300–2500 m. Voucher: Tweedie 20 (EA). Native distribution range: Tropical & S Africa, W Indian Ocean, SW Arabian Peninsula.

***Urochloa comata* (A.Rich.) Sosef** – Habit: Herb. Habitat: Bushland, 600–2200 m. Vouchers: Snowden JD 1202 (EA, US). Native distribution range: Tropical Africa, SW Arabian Peninsula.

***Urochloa jubata* (Fig. & De Not.) Sosef** – Habit: Herb. Habitat: Bushlands, swamp margins, 500–2900 m. Voucher: Jack C 20 (EA). Native distribution range: Tropical Africa, Madagascar.

## F31. POTAMOGETONACEAE

1 Genus, 2 species

EX***Potamogeton nodosus* Poir.** – Habit: Herb. Habitat: Fresh water wetlands, 1510–4250 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cosmopolitan.

***Potamogeton richardii* Solms** – Habit: Herb. Habitat: Fresh water wetlands, 1150–3450 m. Vouchers: Ross R 1346 (BR, EA). Native distribution range: Cameroon, Eritrea to S Africa, Central Madagascar.

## F32. TYPHACEAE

1 Genus, 1 species

***Typha latifolia* L.** – Habit: Herb. Habitat: Permanent swamps, river, 1300–2200 m. Voucher: Snowden JD 1223 (EA). Native distribution range: Temperate Northern Hemisphere to Colombia, W Bolivia to S South America, Nigeria to Kenya.

## F33. XYRIDACEAE

1 Genus, 2 species

***Xyris capensis* Thunb.** – Habit: Herb. Habitat: Upland marsh, bogs, 1100–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World, Brazil.

***Xyris straminea* L.A.Nilsson** – Habit: Herb. Habitat: Wet grassland, outcrop rock, 1750–2400 m. Voucher: Wood GHS 477 (K). Native distribution range: Tropical & S Africa.

# Part 5 Magnoliopsida

## F34. ACANTHACEAE

17 Genera, 45 species

***Acanthopale pubescens* C.B.Clarke** – Habit: Shrub or shrubby herb. Habitat: Wet montane forest, forest swamps, 1655–2790 m. Voucher: Dale IR 50 (EA, BR). Native distribution range: Ethiopia to S Tropical Africa.

***Acanthus eminens* C.B.Clarke** – Habit: Woody shrub. Habitat: Forest margins, undergrowth of montane forest, scrub, thicket clumps in dump areas, 1500–2800 m. Vouchers: Snowden JD 828 (EA), Bamps PRJ 6497 (WAG). Native distribution range: Ethiopia to South Sudan and Central Kenya.

***Acanthus polystachius* Delile** – Habit: Shrub. Habitat: Montane wet evergreen forest, woodland, forest margins, rocky hills, 1100–2800 m. Vouchers: Dale 50 (EA), James E sn (K). Native distribution range: Ethiopia to NW Tanzania.

***Barleria grandicalyx* Lindau** – Habit: Herb. Habitat: Dry savanna, wooded grassland, acacia combraetum woodland, 1100–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Central African Republic to Ethiopia and Tanzania, Angola.

***Barleria ventricosa* Hochst. ex Nees** – Habit: Herb or shrub. Habitat: Forest undergrowth, woodland, thickets, in grassland, 1700–3590 m. Vouchers: Tweedie 131 (K), 838 (K), Rono et al. SAJIT-PR 0218 (EA, HIB). Native distribution range: Eritrea to S Africa, Yemen.

***Crabbea velutina* S.Moore** – Habit: Herb. Habitat: Acacia bushland, riverine forest, thickets, 1750–2250 m. Voucher: Tweedie 1828 (EA). Native distribution range: S Ethiopia to S Africa.

[EX]***Dicliptera colorata*** **C.B.Clarke** – Habit: Herb. Habitat: Woodland, forest, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Rwanda to N Malawi.

***Dicliptera laxata*** **C.B.Clarke** – Habit: Herb. Habitat: Woodland, undergrowth mountain rain forest, 1750–3000 m. Voucher: Tweedie EM 828 (K). Native distribution range: Nigeria to Ethiopia and N Malawi.

**Dicliptera maculata* **subsp.** ***usambarica*** **(Lindau) I.Darbysh.** – Habit: Herb. Habitat: Forest margins, wooded grasslands, disturbed areas, montane and submontane forest, (1150 –)1300–2700(–3050). Vouchers: Dummer RA 3618 (EA), Naiga 505A (EA). Native distribution range: E Uganda to N Tanzania.

**Dicliptera nilotica* **C.B.Clarke** – Habit: Herb. Habitat: Recently burnt areas on roadsides and open woodland, short grassland, 1050–2350 m. Voucher: Tweedie 1524 (EA). Native distribution range: Uganda to W Kenya.

***Dicliptera pumila*** **(Lindau) Dandy** – Habit: Herb. Habitat: Short grassland, open woodland, recently burnt montane grassland, 1750–2850 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: SW Ethiopia to S Tropical Africa.

***Dyschoriste multicaulis*** **Kuntze** – Habit: Herb. Habitat: Disturbed grassland, 1705–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to E Central & E Tropical Africa, Yemen.

***Dyschoriste radicans*** **Nees** – Habit: Herb. Habitat: Low altitude grassland, 1750–2500 m. Voucher: Tweedie EM (1976) (Ref). Native distribution range: Tropical Africa, SW Arabian Peninsula.

***Hygrophila auriculata*** **(Schumach.) Heine** – Habit: Herb. Habitat: Swamps, wet savanna and open woodland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Indian Subcontinent to Indo-China.

***Hypoestes aristata*** **(Vahl) Roem. & Schult.** – Habit: Herb. Habitat: Forest margins and clearings, open woodland, wet grassland, 1750–3000 m. Vouchers: Tweedie EM 812 (K), 823 (K), 829 (K). Native distribution range: Tropical & S Africa.

***Hypoestes forskaolii*** **subsp.** ***hildebrandtii*** **(Lindau) I.Darbysh.** – Habit: Herb. Habitat: Dry grassland, bushland, forest edges, 1750–2820 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: NE Tropical Africa to Kenya.

***Hypoestes triflora*** **Roem. & Schult.** – Habit: Herb. Habitat: Forest margins and undergrowth, forest clearings and grassland, 1600–3300 m. Vouchers: Dawkins 777 (EA), Tweedie EM 830 (K), Tweedie 886 (K), Vollesen K 682 (K), Townsend CC 2335 (BR), Rono et al. SAJIT-PR 0204 (EA, HIB). Native distribution range: Tropical & S Africa, SW Arabian Peninsula, Himalaya to China (Yunnan) and Indo-China.

***Isoglossa gregorii*** **(S.Moore) Lindau** – Habit: Herb. Habitat: Higher montane forest, bamboo zone undergrowth, woodland, 1790–2900 m. Vouchers: Wesche K 587 (EA), Lye 25497 (EA), Mwangangi OM 453 (BR). Native distribution range: Kenya to E Zimbabwe.

***Isoglossa laxa*** **Oliv.** – Habit: Herb. Habitat: Montane Forest understory, clearances, secondary growth, 1750–2550 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to N Tanzania, Madagascar.

***Isoglossa punctata* (Vahl) Brummitt & J.R.I.Wood** – Habit: Herb. Habitat: Montane rain forest undergrowth, margin, secondary bushland, 1350–2750 m. Vouchers: Tweedie 1896 (EA), Dale IR U89 (BR). Native distribution range: Ethiopia to E Central & E Tropical Africa, SW Arabian Peninsula.

***Isoglossa substrobilina* C.B.Clarke** – Habit: Herb. Habitat: Montane rain forest, woodland, 1600–2600 m. Vouchers: Tweedie 891 (K), Napper DM & Tweedie EM 2128 (BR). Native distribution range: E Tropical Africa.

***Justicia anagalloides* T.Anderson** – Habit: Herb. Habitat: Grassland, woodland bushland, 1020–2500 m. Voucher: Tweedie EM 512 (K). Native distribution range: Ethiopia to S Africa.

***Justicia anselliana* T.Anderson** – Habit: Herb. Habitat: Marshy grassland, 1300–1920 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Justicia calyculata* Deflers** – Habit: Herb. Habitat: Roadside, lawn, grassland weed, 100–2200 m. Vouchers: Agnew ADQ (2013) (REF), Rono et al. SAJIT-PR 0014 (EA, HIB). Native distribution range: NE Tropical Africa to N Tanzania, S Arabian Peninsula.

***Justicia diclipteroides* Lindau** – Habit: Herb. Habitat: Woodland edges, forest, 1300–2325 m. Voucher: Rono et al. SAJIT-PR 0170 (EA, HIB). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Justicia eminii* Lindau** – Habit: Shrubby herb. Habitat: Woodland and bushland on rocky hill, forest margin, montane grassland, riverine woodland, 1200–2100 m. Voucher: Tweedie 1723 (EA). Native distribution range: Uganda to S Tropical Africa.

***Justicia exigua* S.Moore** – Habit: Herb. Habitat: Wet savanna, outcrop rock, 1720–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to South Africa.

***Justicia flava* Vahl** – Habit: Herb. Habitat: Open habitat, savanna, woodland, 1750–2500 m. Voucher: Tweedie EM 674 (K). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

EX***Justicia insularis* T.Anderson** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: W Tropical Africa to Chad.

***Justicia striata* (Klotzsch) Bullock** – Habit: Herb. Habitat: Evergreen woodland edges, bushed grassland, 2000–2600 m. Voucher: Tweedie EM 3673 (K). Native distribution range: Tropical Africa.

***Justicia unyorensis* S.Moore** – Habit: Herb. Habitat: Edges of montane rain forest, montane grassland, woodland, bushland, 2170–3100 m. Vouchers: Tweedie 3717 (EA), Bridson DM 67 (WAG). Native distribution range: Nigeria to SW Ethiopia and NW Tanzania.

***Lepidagathis collina* (Endl.) Milne-Redh.** – Habit: Herb or subshrub. Habitat: Open fire prone grass, rocky outcrop, 1750–2170 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: W Tropical Africa to Eritrea and Kenya.

***Lepidagathis glandulosa* Nees** – Habit: Herb or subshrub. Habitat: Open wooded grassland, woodland, 850–2350 m. Vouchers: Tweedie 1370 (EA), Tweedie 1370A (K). Native distribution range: Cameroon to Ethiopia and Zambia.

***Lepidagathis scariosa* Nees** – Habit: Herb or subshrub. Habitat: Wet savanna, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Dry Tropical Africa to Namibia, Arabian Peninsula, Madagascar.

***Mimulopsis alpina* Chiov.** – Habit: Woody herb. Habitat: Montane forest, bushland, bamboo forest, ericaceous zone, 1900–3300 m. Vouchers: Dummer RA 3464 (EA), Tweedie 1379 (EA), Dale IR 65 (BR), Thomas AS 2744 (BR), Mwangangi OM 391 (BR). Native distribution range: E Tropical Africa to N Malawi.

***Mimulopsis arborescens* C.B.Clarke** – Habit: Shrub or tree. Habitat: Wet montane forest, bamboo forest, along clearings, gaps, streams, 1750–3000 m. Vouchers: Hancork 216/37 (EA). Native distribution range: Kenya to E DR Congo, Mozambique.

***Mimulopsis solmsii* Schweinf.** – Habit: woody herb or undershrub. Habitat: Montane forest, bamboo forest, secondary forest, grassland, bushland, 1500–2700 m. Vouchers: Tweedie 2234 (EA), Snowden JD 947 (EA), Tweedie EM 1090 (K), Rono et al. SAJIT-PR 0222 (EA, HIB). Native distribution range: Tropical Africa.

***Monechma debile* Nees** – Habit: Herb. Habitat: Montane grassland, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to S Africa, Arabian Peninsula, India.

***Nicoteba betonica* Lindau** – Habit: Herb or shrub. Habitat: Wet forest, riverside, 700–2200 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Indian Subcontinent.

***Phaulopsis imbricata* (Forssk.) Sweet** – Habit: Herb. Habitat: Woodland, forest, 1750–2400 m. Vouchers: Irwin PH 53, Wesche K 1877 (K), Tweedie 803 (K). Native distribution range: Tropical & S Africa, Comoros, Madagascar, Réunion, SW Arabian Peninsula.

***Ruellia patula* Jacq.** – Habit: Shrubby herb or subshrub. Habitat: Bushland, grassland, open places in forest, 1750–2100 m. Voucher: Polhill 402 (EA). Native distribution range: Tropical & S Africa to Indian Subcontinent to Indo-China.

***Thunbergia alata* Bojer ex Sims** – Habit: Trailing or twinning herb. Habitat: Disturbed areas, secondary vegetation, wet forest, bushlands and thickets, woodland and forest, 1750–3000 m. Vouchers: Symes YE 380, 365 (EA), Lugard EJ 65, 52 (EA), Mwangangi OM 515 (EA). Native distribution range: Tropical & S Africa, Madagascar.

***Thunbergia battiscombei* Turrill** – Habit: Herb. Habitat: Burnt grassland, wooded grassland, 1500–2500 m. Voucher: Mr and Mrs Tweedie 281 (BR). Native distribution range: South Sudan to Kenya.

***Thunbergia gregorii* S.Moore** – Habit: Herb. Habitat: Montane grasslands, bushlands and forest edges, 1350–2300 (–2450). Voucher: Katende & Sheil 1921 (EA). Native distribution range: S Ethiopia to Burundi and Tanzania.

***Thunbergia paulitschkeana* Beck** – Habit: Herb. Habitat: Grassland, bushlands, montane forest, roadsides, 1450–2800 m. Vouchers: Lye & Katende 6407 (EA), Tweedie 3674 (EA), Rono et al. SAJIT-PR 0118 (EA, HIB). Native distribution range: E & S Ethiopia to E Tropical

## F35. AIZOACEAE

1 Genus, 1 species

***Zaleya pentandra* (L.) C.Jeffrey** – Habit: Succulent herb. Habitat: Woodland, grassland, waste places, cultivated ground, roadside, on alkaline soils, 800–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa to Israel and Arabian Peninsula, Pakistan to India.

## F36. AMARANTHACEAE

6 Genera, 12 species

***Achyranthes aspera* L.** – Habit: Herb. Habitat: Wet savanna, woodland, forest, 0–3080 m. Vouchers: Katende 1012 (K). Native distribution range: Tropical & Subtropical Old World.

***Achyranthes aspera* var. *sicula* L.** – Habit: Herb. Habitat: Mist forest, cultivation or disturbed ground, hardpan patches between rocks, seasonal swamps, open grassland, along forest edges and trails, 0–3000 m. Voucher: Dummer RA 3486 (EA). Native distribution range: Macaronesia to W Asia and Arabian Peninsula, Africa.

EX***Amaranthus hybridus* L.** – Habit: Herb. Habitat: Cultivated weed, wet savanna, introduced, 1500–2600 m. Vouchers: Hooper SS; Townsend, CC 1380 (WAG). Native distribution range: S Ontario to W South America.

***Celosia schweinfurthiana* Schinz** – Habit: Herb. Habitat: Forest ridges, clearings and margins, thicker forest, 0–1650 m. Voucher: Human observation sn (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Chenopodiastrum fasciculosum* var. *schimperi* (Asch.) Mosyakin** – Habit: Herb. Habitat: Weed in cultivated areas, waste places, evergreen upland forest, roadside, 1300–2600 m. Vouchers: Lugard EJ 272 (MO), (K). Native distribution range: Ethiopia to N Tanzania.

EX***Chenopodiastrum murale* (L.) S.Fuentes, Uotila & Borsch** – Habit: Herb. Habitat: Wet savanna, 1520–2750 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Macaronesia, Europe, Mediterranean to NE Tropical Africa and Sri Lanka.

EX***Chenopodium album* L.** – Habit: Herb. Habitat: Weed in cultivation, upland evergreen forest, 1650–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Temperate Eurasia to Indian Subcontinent.

***Chenopodium opulifolium* Schrad. ex W.D.J.Koch & Ziz** – Habit: Herb. Habitat: Weed of cultivation, upland evergreen forest, 1600–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Europe, Mediterranean to Nepal, Eritrea to S Tropical Africa.

***Cyathula cylindrica* Moq.** – Habit: Shrubby herb. Habitat: Podocarpus-bamboo zone, forest edge and rocky scarps, 1300–3240 m. Voucher: Beentje HJ 1990 (WAG), Rono et al. SAJIT-PR 0179 (EA, HIB). Native distribution range: Tropical & S Africa, Madagascar.

***Cyathula uncinulata* (Schrad.) Schinz** – Habit: Prostrate or climbing herb or shrub. Habitat: Dense forest and forest edge, 1500–2900 m. Voucher: Stein W Bie (BOT), Rono et al. SAJIT-PR 0216 (EA, HIB). Native distribution range: Tropical & S Africa, Madagascar.

***Dysphania procera* (Hochst. ex Moq.) Mosyakin & Clemants** – Habit: Herb. Habitat: Upland grassland, waste places, weed of cultivation, 1000–2800 m. Voucher: Dummer RA 3630 (EA). Native distribution range: Ethiopia to Zimbabwe, SW Arabian Peninsula.

***Dysphania schraderiana* (Schult.) Mosyakin & Clemants** – Habit: Herb. Habitat: Wet savanna, 1750–2300 m. Vouchers: Hedberg O 7 (BR), Rono et al. SAJIT-PR 0095 (EA, HIB). Native distribution range: Eritrea to S Africa, Arabian Peninsula, Pakistan.

## F37. ANACARDIACEAE

3 Genera, 8 species

***Lannea edulis* Engl.** – Habit: Shrublet. Habitat: Deciduous woodland, wooded and open grassland, prone to fire and floods, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ivory Coast, W Ethiopia to S Africa.

***Lannea schimperi* Engl.** – Habit: Tree. Habitat: Wooded savanna and deciduous woodland, 1750–2250 m. Voucher: Dale 3204 (BR). Native distribution range: Nigeria to Eritrea and S Tropical Africa.

***Ozoroa insignis* subsp. *reticulata* (Baker f.) J.B.Gillett** – Habit: Tree or shrub. Habitat: Wooded grassland, bushland, bushland, 1750–2250 m. Vouchers: Snowden JD 1062 (EA), Goldschmidt W 17 (EA), Jarchner HM 6960 (EA) Chalufack W 281 (EA). Native distribution range: South Sudan to Namibia.

***Searsia longipes* (Engl.) Moffett** – Habit: Shrub or small tree. Habitat: Riverine Forest, wet savanna, woodland, 1750–2400 m. Voucher: Ross R 1352 (BR). Native distribution range: Tropical Africa.

****Searsia longipes* var. *elgonensis* (Kokwaro) Moffett** – Habit: Shrub or small tree. Habitat: Upland bushland, forest edges, riverine associations, 1800–2600 m. Vouchers: Eggeling 5761 (EA), Jackson THE 312 (EA, K), Lugard EJ sn (EA, K). Native distribution range: Uganda to W Central Kenya.

[EX]***Searsia natalensis* (Bernh. ex Krauss) F.A.Barkley** – Habit: Shrub or small tree. Habitat: Deciduous and evergreen forest, riverine associations, forest edges, 1750–3000 m. Vouchers: Lugard 136 (EA), Taiti S 611 (BR). Native distribution range: Coastal Mozambique to South Africa.

***Searsia pyroides* (Burch.) Moffett** – Habit: Shrub or small tree. Habitat: Wet savanna and woodland, 1750–2700 m. Vouchers: Jackson 326 (EA), Podwa SH 11 (EA), Jackson HE & Lugard EJ 326 (EA), Rono et al. SAJIT-PR 0035 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Searsia ruspolii* (Engl.) Moffett** – Habit: Shrub or small tree. Habitat: Upland evergreen bushland, forest edges, riverine associations, 1750–2400 m. Voucher: Dale IR 3195 (BR). Native distribution range: Ethiopia to E DR Congo.

## F38. ANNONACEAE

2 Genera, 2 species

***Annona senegalensis* Pers.** – Habit: Shrub or small tree. Habitat: Evergreen Forest along riverine fringes, 1140–1800 m. Vouchers: Goldschmidt W 22 (EA), Snowden JD 1045(EA). Native distribution range: Africa

***Monodora myristica* Dunal** – Habit: Tree. Habitat: Evergreen forest of riverine fringing type, 1550–1650 m. Voucher: Childs- clarke B 337 (EA). Native distribution range: West Tropical Africa to SW Kenya and NW Angola.

## F39. APIACEAE

18 Genera, 25 species

****Afroligusticum aculeolatum* (Engl.) P.J.D.Winter** – Habit: Herb. Habitat: Montane forest, woodland, 1900–3030 m. Vouchers: Snowden JD 453 (EA), Tweedie EM 1897. Native distribution range: E Central & E Tropical African Mountains.

****Afroligusticum elgonense* (H.Wolff) P.J.D.Winter** – Habit: Herb. Habitat: Montane forest edges, glades, bamboo forest margins, damp grasslands, streamside, marshes in subalpine zones, 1640–3300 m. Vouchers: Tothill BH 2317 (EA), Tweedie 3409, Synge PM S1004 (BR), Tothill BH 2317 (EA). Native distribution range: E Tropical Africa (Mountains).

***Afrosciadium kerstenii* (Engl.) P.J.D.Winter** – Habit: Herb. Habitat: Beside streams in montane zones, bamboo zone, 2700–4300 m. Vouchers: Thomas AS 2333 (EA), Naiga 74 (K). Native distribution range: E Central & E Tropical African Mountains.

***Alepidea peduncularis* Steud. ex A.Rich.** – Habit: Herb. Habitat: Montane grassland, burnt areas, shallow soils, 1530–3600 m. Voucher: Rono et al. SAJIT-PR 0139 (EA, HIB). Native distribution range: Ethiopia to S Africa.

[EX]***Ammi majus* L.** – Habit: Herb. Habitat: Disturbed ground and cultivation, at 1680 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, Mediterranean to Iran and Arabian Peninsula.

***Anthriscus sylvestris* (L.) Hoffm.** – Habit: Herb. Habitat: Bamboo, forest zones, 2100–3970 m. Vouchers: Katende T; Sheil D 817 (K), Thomas AS 2746 (BR), Synge PM S951 (BR), Naiga 228 (K), Kisalye N; van Heist M 547 (K), Rono et al. SAJIT-PR 0117 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Cryptotaenia africana* Drude** – Habit: Herb. Habitat: Wet montane forest floor, 1600–3000 m. Voucher: Hedberg O (BOT). Native distribution range: Nigeria to SW Ethiopia and Tanzania.

***Daucus incognitus* (C.Norman) Spalik, Reduron & Banasiak** – Habit: Herb. Habitat: Forest edges, grassland, 1600–3600 m. Vouchers: Agnew ADQ 7268 (MO), Tiyoy L 1481 (K), Rono et al. SAJIT-PR 0037 (EA, HIB). Native distribution range: Ethiopia to S Tropical Africa.

***Daucus melananthus* (Hochst.) Reduron, Spalik & Banasiak** – Habit: Herb. Habitat: Woodland, upper forest edge, forest glades, 1750–3600 m. Vouchers: Hedberg O 445, 1953 (EA). Native distribution range: Tropical & S Africa, Madagascar, SW Arabian Peninsula.

***Ferula communis* L.** – Habit: Herb. Habitat: Disturbed areas of evergreen woodland, 1500–3720 m. Vouchers: Gillett JB 20955 (BR), Lugard EJ; Lugard C 425 (K). Native distribution range: Mediterranean to Arabian Peninsula and Tanzania.

***Haplosciadium abyssinicum* Hochst.** – Habit: Herb. Habitat: Disturbed places, alpine, upland grassland, 2150–4600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to E Tropical African Mountains.

***Heracleum abyssinicum* (Boiss.) C.Norman** – Habit: Herb. Habitat: Upland grassland, forest margins, volcanic crater, burnt bushlands in the alpine zone, 1680–3790 m. Vouchers: Dummer RA 3712 (EA), Lugard EJ; Lugard C 425, Gillett JB 20953 (EA). Native distribution range: Eritrea to N Malawi.

****Heracleum elgonense* (H.Wolff) Bullock** – Habit: Herb. Habitat: Alpine zones, marshes, open grassy woodland, 1080–4200 m. Vouchers: Clifford C Townsend CC 2327 (MO), Wesche K 1715 (MO), Tothill BH 2384 (MO), Dummer RA 3527 (EA, MO), Thomas AS 522 (MO), Hooper SS|Clifford C Townsend CC 1381 (MO), Gillett JB 18487 (BR), Tothill BH 1939 (EA), Synge PM 925, 1003 (MO), Taylor G 3439 (MO), Hedberg KO 217 (MO), Mwangangi OM 353 (BR). Native distribution range: Ethiopia to E Tropical African Mountains.

***Heteromorpha arborescens* var. *abyssinica* (Hochst. ex A.Rich.) H.Wolff** – Habit: Herb, shrub or tree. Habitat: Woodland, 1750–2400 m. Vouchers: Tweedie 1423 (EA), Rono et al. SAJIT-PR 0088 (EA, HIB). Native distribution range: Eritrea to S Africa, Yemen.

***Lefebvrea atropurpurea* (A.Rich.) P.J.D.Winter** – Habit: Herb. Habitat: Upland pasture, disturbed places, scattered bushes, scrub, 1800–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Uganda.

***Lefebvrea longipedicellata* Engl.** – Habit: Herb. Habitat: Grasslands at forest edge, roadside and shades in upland forest, 1860–2250 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Uganda to Mozambique.

***Oenanthe palustris* (Chiov.) C.Norman** – Habit: Herb. Habitat: Open waters and by streamside at or in forest edge, 1200–3260 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to E Central & E Tropical Africa.

****Oreoschimperella aberdarensis* (C.Norman) Rauschert** – Habit: Herb. Habitat: Disturbed places of montane forest and stream edges, 2200–2910 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya.

***Pimpinella hirtella* A.Rich.** – Habit: Herb. Habitat: Cultivated grounds, open forest, on stony rock ground, upland grassland, 1800–2850 m. Voucher: Tweedie 1285 (EA). Native distribution range: Guinea to Mali, Nigeria to Cameroon, Eritrea to N Tanzania.

***Pimpinella keniensis* C.Norman** – Habit: Herb. Habitat: Woodland, swampy grounds, 1750–2400 m. Vouchers: Tweedie DR 1177 (BR), Rono et al. SAJIT-PR 0185 (EA, HIB). Native distribution range: Kenya to N Tanzania.

****Pimpinella lindblomii* H.Wolff** – Habit: Herb. Habitat: Open montane forest, upland grassland, mountain slope, well-drained soil, 1530–2600 m. Vouchers: Tweedie 1177 (EA), Gerh. Lindblom sn (S). Native distribution range: Uganda to Kenya.

***Pimpinella oreophila* Hook.f.** – Habit: Stoloniferous herb. Habitat: Upper montane forest, Streams in bamboo forest, heath zone, alpine grassland, 3000–4100 m. Vouchers: Dummer RA 3313 (EA), Thomas AS 634 (EA), Hedberg KO 4500 (BR), Naiga 84 (K), Katende T; D Sheil 907 (K), Rose F 10203 (BR), Taylor G 3476 (EA), Tweedie DR 118 (EA). Native distribution range: Bioko, SW Cameroon, Ethiopia to N Tanzania.

***Sanicula elata* Buch.-Ham. ex D.Don** – Habit: Herb. Habitat: Shady Forest floor of bamboo zone and adjacent forest, 1500–3220 m. Vouchers: Naiga 241 (K), Beentje HJ 1972 (WAG). Native distribution range: Eritrea to S Africa, W Indian Ocean, SW Arabian Peninsula, Tropical & Subtropical Asia.

***Steganotaenia araliacea* Hochst.** – Habit: Tree. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

EX***Torilis arvensis* (Huds.) Link** – Habit: Herb. Habitat: Along paths of upland forests, 1560–2850 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Europe to Central Asia and Pakistan, Macaronesia, N Africa to Arabian Peninsula.

## F40. APOCYNACEAE

23 Genera, 39 species

***Asclepias fulva* N.E.Br.** – Habit: Herb. Habitat: Grassland, mixed deciduous woodland, 1750–2250 m. Voucher: Tweedie EM 565 (K). Native distribution range: Uganda to S Africa.

***Aspidoglossum angustissimum* (K.Schum.) Bullock** – Habit: Herb. Habitat: Wooded grassland, openwoodland, marshy areas, 1200–2250 m. Voucher: Tweedie EM 918 (K). Native distribution range: Cameroon to South Sudan and Zimbabwe.

***Aspidoglossum masaicum* (N.E.Br.) Kupicha** – Habit: Herb. Habitat: Grasslands, 1700–2800 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: S Ethiopia to NE Namibia.

***Carissa spinarum* L.** – Habit: Scrambling spiny shrub. Habitat: Forest edges, wet savanna, 1200–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Africa to Indo-China, Australia to New Caledonia.

***Ceropegia abyssinica* Decne.** – Habit: Twiner herb. Habitat: Outcrop rock, grassland, 1800–2400 m. Vouchers: Tweedie EM 767 (K), Tweedie 819 (K). Native distribution range: Central African Republic to Eritrea and S Tropical Africa.

***Ceropegia cufodontii* Chiov.** – Habit: Climbing Herb. Habitat: Forest edge, rocky grassland and bushland, 1450–2350 m. Voucher: Tweedie EM 865 (K). Native distribution range: Ethiopia, Kenya, Uganda.

***Ceropegia denticulata* K.Schum. ex Engl.** – Habit: Twiner herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: E Tropical Africa.

*****Ceropegia filicorona* Masinde** – Habit: Twiner herb. Habitat: Bushland in stony ground, 1750–1900 m. Voucher: Irwin PH 339 (K). Native distribution range: Kenya.

***Ceropegia johnstonii* (N.E.Br.) Bruyns** – Habit: Herb. Habitat: Wet grassland, rock outcrop, 1800–2250 m. Vouchers: Tweedie 2017 (EA), Tweedie, M. 3979 (K), Tweedie 2137 (K). Native distribution range: W Tropical Africa to Kenya.

***Ceropegia meyeri-johannis* Engl.** – Habit: Twiner herb. Habitat: Forest edge and clearing, thickets, woodland, 940–2500 m. Voucher: Rono et al. SAJIT-PR 0090 (EA, HIB). Native distribution range: Kenya to Zimbabwe.

***Cynanchum abyssinicum* Decne.** – Habit: Climbing shrub. Habitat: Upland rain forest edges, woodland, 2000–3000 m. Voucher: Tweedie EM 758 (K). Native distribution range: Eritrea to DR Congo and Tanzania

***Cynanchum altiscandens* K.Schum.** – Habit: Climbing shrub. Habitat: Upland forest edges, 1700–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to E DR Congo and E Tropical Africa.

***Cynanchum gonoloboides* Schltr.** – Habit: Woody climber. Habitat: Montane rain forest, 2400–3600 m. Vouchers: Wesche K 1256 (EA), Tweedie DR 2103 (BR), Rono et al. SAJIT-PR 0234 (EA, HIB). Native distribution range: S Ethiopia to Rwanda and N Tanzania.

***Cynanchum viminale* (L.) L.** – Habit: Succulent twiner. Habitat: Wet savanna, outcrop rock, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, W Indian Ocean, Tropical Asia to Australia

***Gomphocarpus fruticosus* (L.) W.T.Aiton** – Habit: Shrub. Habitat: Upland grassland, 900–2900 m. Voucher: Rono et al. SAJIT-PR 0124 (EA, HIB). Native distribution range: Eritrea to Africa, Arabian Peninsula.

***Gomphocarpus semilunatus* A.Rich.** – Habit: Shrubby herb. Habitat: Disturbed places, flooded grassland, roadside, 1500–2650 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Ethiopia and Zambia.

***Gomphocarpus stenophyllus* Oliv.** – Habit: Shrubby herb. Habitat: Grassland, disturbed or rocky soils, 1600–3050 m. Voucher: Rono et al. SAJIT-PR 0244 (EA, HIB). Native distribution range: S Ethiopia to Tanzania

****Huernia keniensis* R.E.Fr.** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Vouchers: Tweedie DR 299 (K), Tweedie EM 236 (K), Jex-Blake, M. 8417 (K). Native distribution range: Kenya to Tanzania.

***Landolphia buchananii* Stapf** – Habit: Woody climbing shrub. Habitat: Forest near water, woodland, 1400–2400 m. Voucher: Tweedie DR 3253 (BR). Native distribution range: Tropical Africa.

***Margaretta rosea* Oliv.** – Habit: Herb. Habitat: Wet savanna, burnt montane grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Nigeria to South Sudan and S Tropical Africa.

***Marsdenia angolensis* N.E.Br.** – Habit: Herbaceous or woody scrambler. Habitat: Moist forest, bushland, 700–1900 m. Voucher: Tweedie 1886 (K). Native distribution range: Tropical Africa.

***Marsdenia schimperi* Decne.** – Habit: Robust climber. Habitat: Secondary vegetation, upland forest edges, 1800–2650 m. Vouchers: Tweedie DR 736 (BR), Rono et al. SAJIT-PR 0103 (EA, HIB). Native distribution range: Nigeria to Angola and SW Arabian Peninsula.

***Mondia whitei* Skeels** – Habit: Climbing shrub. Habitat: Moist upland forest edges, disturbed forest, 1600–2000 m. Voucher: Rono et al. SAJIT-PR 0193 (EA, HIB). Native distribution range: Tropical & S Africa.

***Orbea dummeri* (N.E.Br.) Bruyns** – Habit: Succulent herb. Habitat: Woodland, grassland, on rocky sandy soils, 1200–1650 m. Voucher: Tweedie EM 1114 (K). Native distribution range: E DR Congo to E Tropical Africa.

***Pachycarpus bisacculatus* (Oliv.) Goyder** – Habit: Herb. Habitat: Seasonally waterlogged grassland, deciduous woodland, 0–2300 m. Voucher: Tweedie EM 1198 (K). Native distribution range: Tropical Africa.

***Pachycarpus eximius* (Schltr.) Bullock** – Habit: Herb. Habitat: Grassland, 1600–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: South Sudan to Burundi and Tanzania.

***Pachycarpus grantii* (Oliv.) Bullock** – Habit: Herb. Habitat: Wooded grassland, 1000–2000 m. Vouchers: E & C Lugard 570 (EA), Irwin PH 278 (EA). Native distribution range: S Sudan to NW Tanzania.

***Pachycarpus lineolatus* (Decne.) Bullock** – Habit: Herb. Habitat: Wooded grasslands, 1000–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa to N Namibia.

***Pergularia daemia* (Forssk.) Chiov.** – Habit: Herbaceous twiner. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Sinai to Arabian Peninsula, Iran to W Indo-China.

***Periploca linearifolia* Quart.-Dill. & A.Rich.** – Habit: Woody climber. Habitat: Upland forest edges, 1900–2900 m. Voucher: Tweedie EM 735 (BR). Native distribution range: Ethiopia to N Zambia.

***Raphionacme madiensis* S.Moore** – Habit: Herb. Habitat: Wooded grassland on outcrop rock, 1800–2400 m. Voucher: Tweedie 1119 (EA). Native distribution range: Uganda to S Tropical Africa.

***Rauvolfia caffra* Sond.** – Habit: Shrub or tree. Habitat: Woodland, forest, 1800–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Saba comorensis* (Bojer) Pichon** – Habit: Scrambling or climbing bush. Habitat: Moist and riverine forest, 1750–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa, Comoros, Madagascar.

***Secamone punctulata* Decne.** – Habit: Climber or small shrub. Habitat: Thickets and riverine forest, 1500–2400 m. Voucher: Andersen R 139 (S). Native distribution range: Dry Tropical Africa to NW Namibia.

***Stathmostelma rhacodes* K. Schum.** – Habit: Herb. Habitat: Seasonally wet and waterlogged grassland, 1500–2650 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: South Sudan to NW Tanzania.

***Tabernaemontana stapfiana* Britten** – Habit: Tree. Habitat: Moist Forest, 1400–2300 m. Vouchers: Snowden JD 860 (BR, EA), Rono et al. SAJIT-PR 0189 (EA, HIB). Native distribution range: Uganda to S Tropical Africa.

***Vincetoxicum caffrum* Kuntze** – Habit: Herb. Habitat: Seasonally burnt grassland, woodland, rocky slopes, 1750–2400 m. Voucher: Lugard 618 (EA). Native distribution range: Tropical & S Africa.

***Vincetoxicum lugardiae* (Bullock) Meve & Liede** – Habit: Herbaceous twinning vine. Habitat: Wet savanna, 1750–2250 m. Voucher: Lugard C 656 (K). Native distribution range: S Ethiopia to Kenya.

***Xysmalobium undulatum* (L.) W.T.Aiton** – Habit: Herb. Habitat: Montane grassland, water logged depressions, roadsides, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to S Africa.

## F41. AQUIFOLIACEAE

1 Genus, 1 species

***Ilex mitis* (L.) Radlk.** – Habit: Tree. Habitat: Woodland, forest, upper forest edge, 1750–3150 m. Vouchers: Tweedie DR 1521 (BR), Battiscombe 643, Dale IR 57 (EA), Ceae 10 (EA), Gardner HM 2250 (EA). Native distribution range: Tropical & S Africa, Madagascar.

## F42. ARALIACEAE

4 Genera, 9 species

***Astropanax abyssinicus* Seem.** – Habit: Tree. Habitat: Upland rain forest, 1750–2770 m. Vouchers: St Clair-Thompson in Eggeling 3952 (EA), Dale IR 3097 (BR). Native distribution range: SE Nigeria and Ethiopia to Zambia.

***Astropanax volkensii* (Harms) Lowry, G.M.Plunkett, Gostel & Frodin** – Habit: Scandent shrub or tall tree. Habitat: Upland rainforest, 1600–3000 m. Vouchers: Dummer RA 3605 (EA), St Clair-Thompson in Eggeling 3958 (EA), Snowden JD 805 (EA, P), Hedberg 162, Taylor G 3414 (BR). Native distribution range: Ethiopia to E Tropical Africa.

***Cussonia arborea* Hochst. ex A.Rich.** – Habit: Tree. Habitat: Wooded grassland, forest, 300–2470 m. Voucher: Snowden JD 850 (EA). Native distribution range: Tropical Africa.

***Cussonia spicata* Thunb.** – Habit: Tree. Habitat: Upland rain forest, woodland, 1750–2550 m. Vouchers: Snowden JD 937 (EA, BR), Eggeling WJ 2492 (BR). Native distribution range: South Sudan to S Africa, Comoros.

***Hydrocotyle mannii* Hook.f.** – Habit: Herb. Habitat: Damp Forest floor, bamboo zone, 650–3000 m. Vouchers: Katende T; Sheil D 611 (K), van Heist, M. 578 (K). Native distribution range: Tropical Africa, Madagascar.

EX***Hydrocotyle ranunculoides* L.f.** – Habit: Herb. Habitat: Muddy streams, ponds and marshes, 700–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: America.

***Hydrocotyle sibthorpioides* Lam.** – Habit: Herb. Habitat: Muddy and peaty stream banks, dump grasslands, upper forest zone and alpine, 1130–4000 m. Vouchers: Rose 10.177 (EA), Agnew ADQ & Agnew S 7277 (EA). Native distribution range: Tropical & Subtropical Old World.

***Polyscias fulva* (Hiern) Harms** – Habit: Tree. Habitat: Upland forest, riverine forest, grassland, 2250–3000 m. Voucher: St Clair-Thompson in Eggeling 3953 (EA). Native distribution range: Tropical Africa, SW Arabian Peninsula.

****Polyscias kikuyuensis* Summerh.** – Habit: Tree. Habitat: Upland rain forest, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya.

## F43. ASTERACEAE

68 Genera, 191 species

EX***Achillea millefolium* L.** – Habit: Herb. Habitat: Weed or in cultivation, forest, woodland, roadsides, 1950 m. Voucher: Jack C 163 (EA). Native distribution range: Subarctic & Temperate Northern Hemisphere to Guatemala

EX***Acmella caulirhiza* Delile** – Habit: Herb. Habitat: Woodland, forest, Riverside grassland, 1750–3100 m. Vouchers: Mwangangi OM 475 (EA), Hedberg O 30 (S), Granvik H 78 (S). Native distribution range: Tropical & S Africa, W Indian Ocean.

EX***Adenostemma caffrum* DC.** – Habit: Herb. Habitat: Wet savanna, 1750–2300 m. Voucher: Lugard 574 (EA). Native distribution range: Nigeria to Ethiopia and S Africa, W Yemen.

***Adenostemma mauritianum* DC.** – Habit: Herb. Habitat: Forest, forest edge, stream banks, bamboo zone, 1300–3000 m. Vouchers: Tweedie 921 (EA), Hedberg O 274 (BOT). Native distribution range: Tropical Africa, W Indian Ocean.

EX***Ageratina adenophora* (Spreng.) R.M.King & H.Rob.** – Habit: Herb or shrub. Habitat: Montane forest and forest margins, bamboo zone, 1960–2600 m. Vouchers: Tweedie 2679 (EA), Lavranos JJ;Newton I 17773 (WAG, US), Lye & Pocs 23135 (EA), Rono et al. SAJIT-PR 0211 (EA, HIB). Native distribution range: Mexico.

***Ambassa hochstetteri* Steetz** – Habit: Shrub, herb or small tree. Habitat: Bushland, forest, forest edges, 1000–2400 m. Vouchers: Tweedie 705 (EA), Granvik H (S), Hedberg O 175 (UPS). Native distribution range: Congo to Ethiopia and Angola.

***Anisopappus chinensis* (L.) Hook. & Arn.** – Habit: Herb. Habitat: Upland grassland, dump marshy sites, 1500–2500 m. Vouchers: Irwin PH hb (MNHN), Irwin PH 49 (S). Native distribution range: Sikkim to S China and Indo-China, Philippines.

***Anisopappus chinensis* subsp. *africanus* (Hook.f.) S.Ortiz & Paiva** – Habit: Herb. Habitat: Wet savanna, 1750–2320 m. Voucher: Tweedie 825 (S). Native distribution range: Tropical Africa, Madagascar.

***Anthemis tigreensis* J.Gay ex A.Rich.** – Habit: Herb. Habitat: Montane and Afroalpine grasslands, woodland, forest, moorland, 2500–4300 m. Vouchers: Thomas AS 598 (EA), Gillett JB 18464 (BR), Taylor G 3496 (S), Rono et al. SAJIT-PR 0146 (EA, HIB). Native distribution range: NE & E Tropical Africa.

[EX]***Artemisia afra* Jacq.** – Habit: Shrub. Habitat: Montane grassland, woodland, forest, moorland, 2000–4000 m. Vouchers: Kokwaro JO 2482 (EA), Major C & Lugard EJ 77 (EA), Tweedie D.R 126 (EA), Bickford N 39 (EA). Native distribution range: Ethiopia to S Africa.

***Aspilia kotschyi* (Sch.Bip. ex Hochst.) Oliv.** – Habit: Herb. Habitat: Wet savanna, 010–1900 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & South Africa, W Yemen.

***Aspilia mossambicensis* (Oliv.) Wild** – Habit: Herb or shrub. Habitat: Ruderal sites, seasonal swamps, woodland, wooded grassland, 005–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa, W Yemen.

***Aspilia pluriseta* Schweinf. ex Engl.** – Habit: Herb or shrub. Habitat: Grassland, woodland, 1050–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: South Sudan to S Africa.

***Athrixia rosmarinifolia* Oliv. & Hiern** – Habit: Shrub. Habitat: Montane or alpine grassland, forest clearing, 2600–3500 m. Voucher: Hedberg 4507 (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Baccharoides adoensis* (Sch.Bip. ex Walp.) H.Rob.** – Habit: Woody herb or subshrub. Habitat: Grassland and wooded grassland, deciduous woodland, riverine and old cultivation, 800–2750 m. Voucher: Symes 239 (EA). Native distribution range: Tropical Africa.

[EX]***Baccharoides calvoana* subsp. *leucocalyx* (O.Hoffm.) Isawumi, El-Ghazaly & B.Nord.** – Habit: Shrub, woody herb, rarely a tree. Habitat: Riverine, forest margin, bamboo forest margins, upland bushland, savanna, 1500–3000 m. Voucher: Tothill BH 2283 (EA). Native distribution range: Tanzania.

***Baccharoides dumicola* (S.Moore) Isawumi, El-Ghazaly & B.Nord.** – Habit: Herb or small shrub. Habitat: Wet grassland, swamps, 1100–2300 m. Vouchers: Tweedie 3677 (EA), Gilbert & Mesfin 6561 (EA). Native distribution range: South Sudan to E Central & E Tropical Africa.

***Baccharoides hymenolepis* (A.Rich.) Isawumi, El-Ghazaly & B.Nord.** – Habit: Woody herb, shrub or tree. Habitat: forest and bamboo margins, upland bushland, savanna, 150–2950 m. Voucher: Rono et al. SAJIT-PR 0215 (EA, HIB). Native distribution range: Ethiopia to Kenya.

***Baccharoides lasiopus* (O.Hoffm.) H.Rob.** – Habit: Shrub or woody herb. Habitat: Forest clearings, margins, riverine thickets, secondary grasslands, old cultivations, 1100–2800 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Mozambique.

***Baccharoides pumila* (Kotschy & Peyr.) Isawumi** – Habit: Herb. Habitat: Burnt wooded grassland, wet grassland, 1750–1850 m. Voucher: Tweedie 124 (EA). Native distribution range: W Tropical Africa to South Sudan.

***Berkheya spekeana* Oliv.** – Habit: Herb. Habitat: Wooded grassland, 1800–3810 m. Vouchers: Lewis WH 5968 (US), Hedberg O (S), Holm Å 63 (S), Gerh. Lindblom sn (S). Native distribution range: Nigeria to Ethiopia and Tanzania.

***Bidens biternata* (Lour.) Merr. & Sherff** – Habit: Herb. Habitat: Woodland, forest margin, weed of cultivation, ruderal sites, 1750–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World.

***Bidens buchneri* Sherff** – Habit: Herb or shrub. Habitat: Wooded grassland among rocks, 1450–2500 m. Vouchers: symes 219 (EA), Gerh. Lindblom (S). Native distribution range: South Sudan to Angola.

**Bidens elgonensis* (Sherff) Agnew** – Habit: Herb or shrub. Habitat: Grassland and Erica bushland, 2500–4000 m. Vouchers: Wesche K 1680, 858 (EA), Lind EM 2099 (EA), Smith SA, Beentje HJ & Muasya A 163 (US), Taylor G 3586 (S), Dummer RA 3304 (S), Thomas AS 2689 (EA). Native distribution range: Uganda to Kenya.

EX***Bidens flagellata* (Sherff) Mesfin** – Habit: Herb. Habitat: Grassland, 1600–3300 m. Voucher: Rono et al. SAJIT-PR 0116 (EA, HIB). Native distribution range: Ethiopia to Burundi.

***Bidens grantii* Sherff** – Habit: Herb. Habitat: Grassland, ruderal sites, 1100–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Central & E Tropical Africa.

EX***Bidens pilosa* L.** – Habit: Herb. Habitat: wet savanna, woodland, 400–2500 m. Vouchers: Lugard EJ 95 (EA), Hedberg O 17 (S), Holm Å 75 (S). Native distribution range: Tropical & Subtropical America.

***Bidens ternata* (Chiov.) Sherff** – Habit: Herb. Habitat: Wooded grassland, bushland, forest clearing, 1500–2700 m. Vouchers: Tweedie 394 (EA, MO). Native distribution range: Cameroon to Ethiopia and Tanzania.

***Bothriocline auriculata* (M.Taylor) C.Jeffrey** – Habit: Herb or shrub. Habitat: Bamboo thickets, montane forest, 2700–3150 m. Vouchers: Dummer RA 3563 (EA, MO), Wesche K 164, 1252 (MO), Kisalye 270 (MO), Liebenberg 1584 (EA)), Tothill BH 2330 (EA). Native distribution range: Uganda.

***Bothriocline fusca* (S.Moore) M.G.Gilbert** – Habit: Shrub or shrubby herb. Habitat: Roadside and disturbed places, 2000–3600 m. Vouchers: Kahuho SK 9 (K), Major EJ; Lugard C 370 (K), Smith SAL; Beentje HJ; Muasya AM 162 (K), Hedberg O 88 (K), Taylor G 3443 (S), Tweedie 2552 (K), Rono et al. SAJIT-PR 0267 (EA, HIB). Native distribution range: E Tropical Africa to Zambia.

***Bothriocline longipes* N.E.Br.** – Habit: Herb or shrub. Habitat: Forest margin and clearing, Upland grassland, 1500–2800 m. Vouchers: Dawkins H 784 (K), Holm Å 71 (S), Granvik H 24 (S). Native distribution range: Gabon to Kenya and S Tropical Africa.

****Bothriocline monticola* (M.Taylor) Wech.** – Habit: Shrub. Habitat: Rare in margins of montane forest, 2550–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: South Sudan to Kenya.

***Carduus afromontanus* R.E.Fr.** – Habit: Herb. Habitat: Forest clearings, bamboo zones, 2350–3430 m. Voucher: Dummer RA 3509 (EA). Native distribution range: Kenya to Uganda.

****Carduus keniensis* R.E.Fr.** – Habit: Herb. Habitat: Moorland, heath zone, 2950–4300 m. Vouchers: Muasya J & Berit Gehrke 144 (EA), Hamilton & Perrott 76/569 (EA), Tweedie R 39 (EA), 107 (EA), Liebenberg 1610 (EA), Dummer RA 3349 (EA). Native distribution range: E Tropical Africa.

***Carduus leptacanthus* Fresen.** – Habit: Herb. Habitat: Wooded grassland, forest glades, margins, 1550–2450 m. Vouchers: Lugard 191 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Carduus nyassanus* R.E.Fr.** – Habit: Herb. Habitat: Woodland, montane forest, wet disturbed ground, 1750–3350 m. Vouchers: Jack 343 (EA), Lewis WH 5972 (US). Native distribution range: Nigeria to Ethiopia and S Tropical Africa.

***Carduus nyassanus* subsp. *kikuyorum* (R.E.Fr.) C.Jeffrey** – Habit: Herb. Habitat: Upland grassland, moorland, forest glades, bamboo margins, 1500–3450 m. Voucher: Tothill BH 2368 (EA). Native distribution range: E Central & E Tropical Africa.

***Carduus schimperi* Sch.Bip.** – Habit: Herb. Habitat: Grassland, alpine and subalpine zone, 1800–4100 m. Vouchers: Tweedie DR 103 (EA), Lisowski S 84147 (BR), Rono et al. SAJIT-PR 0232 (EA, HIB). Native distribution range: Ethiopia to Tanzania.

***Carduus schimperi* subsp. *nanus* (R.E.Fr.) C.Jeffrey** – Habit: Herb. Habitat: Grassland, moorland, 2250–4050 m. Vouchers: Hedberg O 136 (S, EA), Dummer RA 3311 (EA), Liebenberg 1602 (EA), Tothill BH 2328 (EA). Native distribution range: E Central & E Tropical Africa.

***Centaurea praecox* Oliv. & Hiern** – Habit: Herb. Habitat: Wet savanna, grassland, wooded grassland, 1750–2600 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

[EX]***Chromolaena corymbosa* (Aubl.) R.M.King & H.Rob.** – Habit: Herb. Habitat: Disturbed grounds, wet savanna, 30–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Caribbean to French Guiana.

[EX]***Chrysanthellum americanum*** **(L.) Vatke** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Mexico (Chiapas, Michoacán) to Central America, Caribbean.

[EX]***Cineraria deltoidea*** **Sond.** – Habit: Herb. Habitat: Woodland, grassland, forest edge, moorland, 1750–4300 m. Vouchers: Taylor G 3519, (S, EA), 3440 (S), Adamson J 478, 498 (EA), Hedberg O 118 (S) 4484 (EA), 891, Ekkens DB 405 (EA), Morris 268 (EA), Synge PM S 1916, 1085 (S), Granvik H 163 (S), Tothill BH J T2427 (US), Rono et al. SAJIT-PR 0243 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Cirsium buchwaldii*** **O.Hoffm.** – Habit: Herb. Habitat: Swampy grassland, 1835–3050 m. Vouchers: Taylor G 3588 (EA, S). Native distribution range: South Sudan to Zambia.

[EX]***Cirsium vulgare*** **(Savi) Ten.** – Habit: Herb. Habitat: In cultivation, 1790–2400 m. Voucher: Rono et al. SAJIT-PR 0168 (EA, HIB). Native distribution range: Europe to Siberia and Arabian Peninsula, NW Africa.

***Conyza clarenceana*** **Oliv. & Hiern** – Habit: Herb. Habitat: Swamps, along streams, moorland subalpine marshes, 2300–3300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon, Ethiopia, Gulf of Guinea Island, Kenya, Uganda, Zambia.

***Conyza newii*** **Oliv. & Hiern** – Habit: Shrub or woody herb. Habitat: Forest, montane scrub woodland, 1750–3050 m. Voucher: Dummer RA 3608 (EA). Native distribution range: Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda, Zambia, Zaïre

***Conyza pallidiflora*** **R.E.Fr.** – Habit: Woody herb. Habitat: Disturbed areas of forest, woodland, 2000–3000 m. Vouchers: Major EJ & Lugard C 401 (EA), Rono et al. SAJIT-PR 0262 (EA, HIB), Cheseny CMC 46 (EA). Native distribution range: Kenya.

***Cotula abyssinica*** **Sch.Bip. ex A.Rich.** – Habit: Herb. Habitat: Short alpine grassland, forest margin, heath zones, bamboo zone, 2100–3650 m. Vouchers: Dummer RA 3579 (EA), Thomas AS 536, 2704 (EA), Lye KA 5715 (EA), Beentje HJ 1944 (EA, WAG), Hedberg O 945 (S). Native distribution range: Eritrea to E Central & E Tropical Africa.

[EX]***Cotula australis*** **Hook.f.** – Habit: Herb. Habitat: moist cultivation, 1200–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Zimbabwe to S Africa, Madagascar, Australasia.

*****Cotula cryptocephala*** **Sch.Bip. ex A.Rich.** – Habit: Herb. Habitat: Rare along paths in alpine grassland, 3140–3800 m. Vouchers: Hedberg 996 (S), Hedberg O 4515 (BR, EA), Klotzli F et al. 1953 (EA). Native distribution range: Ethiopia to Kenya.

[EX]***Crassocephalum crepidioides*** **(Benth.) S.Moore** – Habit: Herb. Habitat: Grassland, forest margins, secondary vegetation, 1700–2500 m. Voucher: Holm Å 70 (S). Native distribution range: Tropical & S Africa, Madagascar.

***Crassocephalum montuosum*** **(S.Moore) Milne-Redh.** – Habit: Herb or wooded shrub. Habitat: Clearing of montane forest, disturbed forest, bamboo zone, 1500–3260 m. Vouchers: Morrison 264 (EA), Dawkins HC 785 (K, EA), Mwangangi

OM 486 (BR, EA), 395 (EA), Jack C 156 (EA), Granvik H 329 (S). Native distribution range: Tropical Africa, Madagascar.

***Crassocephalum paludum* C.Jeffrey** – Habit: Herb. Habitat: Swamps, grassland, 2250–3000 m. Voucher: Tweedie 3646 (EA). Native distribution range: South Sudan to Zambia.

[EX]***Crassocephalum picridifolium* S.Moore** – Habit: Herb. Habitat: Swampy grasslands, wet savanna, woodland, 1750–2700 m. Vouchers: Symes YE 345 (EA), Major C & Lugard EJ 190 (EA), Jack C 2 (EA), Wiltshire FM 19 (K), Tweedie 3577 (US), Native distribution range: Tropical & S Africa.

***Crassocephalum rubens* (Jacq.) S.Moore** – Habit: Herb. Habitat: Disturbed cultivated areas, grassland, 1750–2500 m. Voucher: Lugard 439 (EA). Native distribution range: Africa, Arabian Peninsula.

***Crassocephalum rubens* var. *sarcobasis* (DC.) C.Jeffrey & Beentje** – Habit: Herb. Habitat: disturbed cultivated areas, grassland, 1750–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa to South Africa, Comoros, Madagascar, SW Arabian Peninsula.

***Crassocephalum vitellinum* S.Moore** – Habit: Herb. Habitat: Grassland clearing, forest, woodland, bushlands, 1500–2800 m. Voucher: Hedberg O 313 (S). Native distribution range: Nigeria to South Sudan and Zambia.

***Crepis carbonaria* Sch.Bip.** – Habit: Herb. Habitat: heath zones, short montane grassland, 1350–4000 m. Vouchers: Morris MES 272 (EA), Battiscombe E 674 (EA), Hedberg O 848 (EA), Wesche K 1348 (K), Smith SAL; Beentje HJ; Muasya AM 166 (K), Tweedie 26 (K), Irwin PH 14 (K), Tweedie 2549 (K). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Crepis dianthoseris* N.Kilian, Enke, Sileshi & Gemeinholzer** – Habit: Herb. Habitat: Alpine zone by streamside, 3600–4300 m. Vouchers: Wesche K 434 (EA), Rono et al. SAJIT-PR 0239 (EA, HIB). Native distribution range: Ethiopia to Tanzania.

***Crepis rueppellii* Sch.Bip.** – Habit: Herb. Habitat: Grassland, 1600–3200 m. Vouchers: Tweedie 729. Native distribution range: NE & E Tropical Africa, Arabian Peninsula.

***Crepis schultzii* Hochst. ex Oliv.** – Habit: Herb. Habitat: Clearing in bamboo zone. Voucher: Tothill BH 2325 (EA). Native distribution range: Ethiopia to Uganda.

[**]***Dendrosenecio elgonensis* subsp. *barbatipes* (Hedberg) E.B.Knox** – Habit: Tree or shrub. Habitat: Upper afro alpine zone, 3750–4225 m. Vouchers: Gardener 2269 (K), Hedberg O 872 (K), Thomas AS 627 (K), Ekkens 622 (EA), Fairbairn G 3159 (BR), Synge P M 922 (BR), Dale A2/41 (EA), Eggeling 5753 (EA). Native distribution range: Uganda to Kenya (Mt Elgon).

[**]***Dendrosenecio elgonensis* (T.C.E.Fr.) E.B.Knox subsp. *elgonensis*** – Habit: Tree or shrub. Habitat: Upper Afromontane Forest, 2750–4200 m. Vouchers: Tweedie 370 (K), Tweedie DR 2 (K), Lugard & Lugard 699 (K), Osmaston HA 4017 (K), Porter 2732, Synge 888 (EA), Dale K 3211 (EA), Thomas AS 628 (EA). Native distribution range: Uganda to Kenya (Mt Elgon).

[EX]***Dendrosenecio johnstonii* (H.H.Johnst.) B.Nord.** – Habit: Tree or shrub. Habitat: Upper afro alpine zone, 2500–4000 m. Voucher: Fairbairn G 3159 (US). Native distribution range: Tanzania (Mt Kilimanjaro).

***Dichrocephala chrysanthemifolia* (Blume) DC.** – Habit: Herb. Habitat: Woodland, forest and upper wet montane forest, 2200–3724 m. Vouchers: Morrison MES 270 (EA), Major EJ & Lugard C 241 (EA), Hedberg O 947 (S), Taylor G 3600 (S), Lisowski S 58054 (BR), Rwaburundindore 444 (EA). Native distribution range: Tropical & Subtropical Old World.

***Dichrocephala chrysanthemifolia* var. *alpina* (R.E.Fr.) Beentje** – Habit: Herb. Habitat: Alpine zone, 2600–3600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to E DR Congo and Tanzania.

***Dichrocephala integrifolia* (L.f.) Kuntze** – Habit: Herb. Habitat: Disturbed wet montane forest, cultivation, grassland, bamboo zone, 1700–3670 m. Vouchers: Jack C 199 (EA), Agnew ADQ & Agnew S 7266 (EA), Holm Å 56 (S). Native distribution range: Turkey to Asia and Pacific.

***Echinops aberdaricus* R.E.Fr.** – Habit: Herb. Habitat: Montane grassland, moorland, forest margin, clearing, 2400–3600 m. Voucher: Human observation sn (EA). Native distribution range: Kenya to Tanzania.

***Echinops amplexicaulis* Oliv.** – Habit: Herb. Habitat: Wooded grasslands, edges of cultivated lands, 1300–2700 m. Vouchers: Lugard C & Lugard EJ 82 (EA). Native distribution range: Nigeria to Ethiopia and Tanzania.

***Echinops angustilobus* S.Moore** – Habit: Herb. Habitat: Grassland, forest edges, 2000–2850 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Kenya.

***Echinops eryngiifolius* O.Hoffm.** – Habit: Herb. Habitat: Grassland, woodland, 1050–1850 m. Vouchers: Lugard & Lugard 553. Native distribution range: E Central & E Tropical Africa.

***Echinops hispidus* Fresen.** – Habit: Herb. Habitat: Upland grassland, scattered tree grassland, 1500–2300 m. Vouchers: Major C & Lugard EJ 158 (EA), Jack C 83 (EA). Native distribution range: Eritrea to Tanzania.

***Echinops hoehnelii* Schweinf.** – Habit: Herb. Habitat: Forest edges, woodland, heathland, 2200–3500 m. Vouchers: Adamson J 487 (EA), Lisowski S 55110 (BR), Hamilton & Perrott 76/400 (EA), Thomas 638 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

**Echinops lanatus* C.Jeffrey & Mesfin** – Habit: Herb. Habitat: Montane grasslands, stoebe bushlands, 2400–3600 m. Vouchers: Townsend CC 2334 (EA), Fries re (EA), Freidberg A 152 (EA). Native distribution range: Cameroon, E Tropical Africa.

***Emilia coccinea* G.Don** – Habit: Herb. Habitat: Roadside, grassland, waste grounds, 1800–2400 m. Voucher: Webster 8860 (EA). Native distribution range: Tropical Africa.

***Emilia debilis* S.Moore** – Habit: Herb. Habitat: Moist grassland, 1750–2750 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: E Central & E Tropical Africa.

***Emilia discifolia* (Oliv.) C.Jeffrey** – Habit: Herb. Habitat: Disturbed forests, 500–2500 m. Voucher: Holm Å 59 (S). Native distribution range: Ethiopia to S Tropical Africa.

[EX]***Emilia integrifolia* Baker** – Habit: Herb. Habitat: Disturbed swamp, moist grasslands, 1900–2800 m. Vouchers: Webster 8859 (EA), Lugard EJ 101 (EA). Native distribution range: DR Congo to S Tropical Africa, Madagascar.

[EX]***Emilia sonchifolia* (L.) DC.** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & Subtropical Old World.

[*]***Emilia tenera* (O.Hoffm.) C.Jeffrey** – Habit: Herb. Habitat: Grassland, swampy grassland, 1800–2700 m. Voucher: Lind EM 269 (EA). Native distribution range: E Tropical Africa.

***Emilia tricholepis* C.Jeffrey** – Habit: Herb. Habitat: Rock crevices, cultivated lands, 700–2000 m. Voucher: Wesche K 366 (K). Native distribution range: Kenya.

[EX]***Erigeron bonariensis* L.** – Habit: Herb. Habitat: Grassland, roadside, 400–2600 m. Voucher: Holm Å 73 (S). Native distribution range: Mexico to Tropical America.

***Erigeron schimperi* Sch.Bip. ex Schweinf.** – Habit: Woody herb or small shrub. Habitat: Grassland, impeded drainage, woodland and upper forest edge, 2000–3000 m. Vouchers: Tweedie 1412 (EA), Hedberg O 1061 (UPS), J Wilson 1237 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa, Yemen.

***Eschenbachia gouanii* (L.) G.L.Nesom** – Habit: Herb. Habitat: Disturbed grassland, 1500–3600 m. Vouchers: Hedberg O 911 (S), Rono et al. SAJIT-PR 0180 (EA, HIB). Native distribution range: Africa, Arabian Peninsula.

[EX]***Eschenbachia stricta* (Willd.) Raizada** – Habit: Herb. Habitat: Disturbed grassland, 1500–2000 m. Vouchers: Waston J 1195 (EA), Tweedie 2394 (EA), Lugard C & Major EJ 31 (EA). Native distribution range: Sahara & Sahel to S Jordan and Arabian Peninsula, Himalaya to China (Sichuan, Yunnan) and N Indo-China.

***Eschenbachia subscaposa* (O.Hoffm.) G.L.Nesom** – Habit: Herb. Habitat: Woodland, alpine and subalpine grassland, 1750–4000 m. Vouchers: Marrison MES 271 (EA), Tweedie 53 (EA), Major EJ & Lugard J 616 (EA), Adamson J 501 (EA), Hedberg O 122, 1026 (S), Lisowski S 57185 (BR), Rono et al. SAJIT-PR 0240 (EA, HIB). Native distribution range: Nigeria to Kenya and S Tropical Africa.

[EX]***Ethulia conyzoides* L.** – Habit: Herb. Habitat: Swampy grassland, 1160–1670 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa to Sinai, Indian Subcontinent to China (Yunnan) and Peninsula Malaysia, Taiwan to Philippines.

***Ethulia vernonioides* (Schweinf.) M.G.Gilbert** – Habit: Herb. Habitat: Grasslands, 1650–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to Tanzania.

[**]***Euryops elgonensis* Mattf.** – Habit: Shrub. Habitat: Heath zone, bamboo zone, moorland, 300–4200 m. Vouchers: Lugard C & Lugard EJ 368 (K, EA), Tweedie R 18 (EA), 76 (EA), Hedberg 863 (K, EA), Hedberg O 4525 (EA), Ekkens DB 407 (EA), Dummer RA 3386 (K), Lisowski S 53797 (BR), Kokwaro JO 2459 (EA),

Freidberg A 145 (EA), Holm Å 77 (S), Taylor G 3529 (S), Granvik H 155 (S), Tothill BH 269 (EA), Thomas AS 2738 (EA). Native distribution range: Uganda.

[EX]***Galinsoga parviflora* Cav.** – Habit: Herb. Habitat: Moist grassland, woodland, forest margin, 2300–3000 m. Vouchers: Major C & Lugard EJ 107 (EA), Dawkins, H.C. 778 (K), Hedberg O 8 (S), Holm Å 58 (S), Granvik H 294 (S). Native distribution range: Mexico to Tropical America.

[EX]***Galinsoga quadriradiata* Ruiz & Pav.** – Habit: Herb. Habitat: waste places, roadsides, 1800–2600 m. Voucher: Beentje HJ 1943 (EA). Native distribution range: Mexico to S Tropical America.

[EX]***Gamochaeta purpurea* (L.) Cabrera** – Habit: Herb. Habitat: Upland grassland, waste places, roadside, 1750–2400 m. Voucher: Tweedie 2244 (EA). Native distribution range: E Canada to Tropical America.

***Gerbera viridifolia* (DC.) Sch.Bip.** – Habit: Herb. Habitat: Wooded grassland, grassland, woodland, 1600–2750 m. Vouchers: Lewis WH 5969 (S), Major C & Lugard EJ 515 (EA), Podwa SH 24 (BR, EA), Beentje HJ 1930 (EA). Native distribution range: Cameroon to Eritrea and S Africa.

[EX]***Gnaphalium declinatum* L.f.** – Habit: Herb. Habitat: Woodland, forest, 1750–3150 m. Vouchers: Beentje HJ 1940 (WAG), Hedberg O 110 (S). Native distribution range: Zambia to S Africa.

***Gnaphalium unionis* Sch.Bip. ex Oliv. & Hiern** – Habit: Herb. Habitat: Montane grassland, montane forest and heath zone, 1600–3800 m. Vouchers: Thomas AS 604 (EA), Forbes 264 (EA), Wood G 147 (EA). Native distribution range: Eritrea to Burundi.

***Gnaphalium unionis* var. *rubriflorum* (Hilliard) Beentje** – Habit: Herb. Habitat: Wet montane grassland, montane forest, heath zone, shallow soils, 1600–3150 m. Vouchers: Mwangangi OM 473 (EA), Tweedie 1296 (K), Wilson J 1193 (EA), Rono et al. SAJIT-PR 0264 (EA, HIB). Native distribution range: Ethiopia to E Central & E Tropical Africa.

**Guizotia jacksonii* (S.Moore) J.Baagoe** – Habit: Herb. Habitat: Moist Forest glades, short grassland in bamboo, moorland, heath zones, 2350–3900 m. Voucher: Wesche K 1940 (EA). Native distribution range: Uganda to Kenya.

***Guizotia scabra* Chiov.** – Habit: Herb. Habitat: Grassland, forest clearing, 1300–3200 m. Vouchers: Dummer RA 3599 (US), Granvik H 260 (S), Synge PM S 847 (S), Holm Å 81 (S), Thomas AS 2701 (EA), Rono et al. SAJIT-PR 0203 (EA, HIB). Native distribution range: Tropical Africa, W Yemen.

[EX]***Gutenbergia cordifolia* var. *marginata* (O.Hoffm.) C.Jeffrey** – Habit: Herb. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tanzania to S Tropical Africa.

***Gutenbergia petersii* Steetz** – Habit: Herb. Habitat: Outcrop rock, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya to Tanzania.

***Gutenbergia rueppellii* Sch.Bip.** – Habit: Herb. Habitat: Rocky eroded grassland, 900–2300 m. Vouchers: Gilbert & Mesfin 6546 (EA), Rono et al. SAJIT-PR 0028 (EA, HIB). Native distribution range: Eritrea to E Central & E Tropical Africa.

***Gymnanthemum amygdalinum* (Delile) Sch.Bip.** – Habit: Shrub or small tree. Habitat: Woodland, wooded grassland, secondary bushlands, forest margin, 1750–2400 m. Vouchers: Jackson 303 (EA), Freidberg A 27 (EA). Native distribution range: E Bolivia to Brazil, Tropical Africa, W Yemen.

***Gymnanthemum auriculiferum* (Hiern) Isawumi** – Habit: Shrub or small tree. Habitat: Disturbed bushland, montane forest margins, riverine forest, 1100–3000 m. Vouchers: Rono et al. SAJIT-PR 0154 (EA, HIB), Mwangangi OM 412 (BR), Hedberg O (UPS), Snowden JD 823 (MNHN). Native distribution range: Nigeria to Ethiopia and Angola.

***Gymnanthemum urticifolium* (A.Rich.) H.Rob.** – Habit: Shrub. Habitat: Secondary Forest, montane forest edges, 2160–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia, Kenya, DR Congo.

***Gynura amplexicaulis* Oliv. & Hiern** – Habit: Herb. Habitat: Disturbed places, swampy sites in grassland, weed in cultivations, 2000–3000 m. Voucher: Lugard 240 (EA). Native distribution range: Central African Republic to South Sudan and Tanzania.

***Gynura scandens* O.Hoffm.** – Habit: Herb. Habitat: mist forest clearing, about 2200 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Kenya and S Tropical Africa.

***Haplocarpha rueppelii* Beauverd** – Habit: Herb. Habitat: Montane grassland, moorland, upper bamboo zone, 2600–4300 m. Vouchers: Lienberg 1578 (EA), Wood 127 (EA), Gillet 18461 (EA), Rono et al. SAJIT-PR 0145 (EA, HIB). Native distribution range: Ethiopia to E Tropical Africa.

*****Helichrysum amblyphyllum* Mattf.** – Habit: Shrub. Habitat: Alpine stony grassland, 3200–4200 m. Vouchers: Dummer RA 3319 (K, US), Hedberg O 4454 (UPS), Hedberg O 864 (UPS, S), Åke Strid 3549 (S), Gardner HM 2271 (NMNH), Synge PM 1904 (BR). Native distribution range: Uganda (Mt Elgon).

***Helichrysum argyranthum* O.Hoffm.** – Habit: Shrub. Habitat: Forest edges, streamside in heathland, 2100–3900 m. Vouchers: Dummer RA 3597 (MNHN), Lisowski S 57327 (BR), Lisowski S 57305 (BR), Lisowski S 57293 (BR), Thomas AS 2743 (BR), Synge PM 836 (BR), Synge PM 959 (BR), Ross R 1357 (BR), Mwangangi OM 501 (BR), Rono et al. SAJIT-PR 0242 (EA, HIB). Native distribution range: Ethiopia to E Central & E Tropical Africa.

****Helichrysum brownei* S.Moore** – Habit: Shrublet or prostrate herb. Habitat: Moorland, alpine slopes, 3150–4321 m. Vouchers: Taylor G 3507 (BR), Arambourg C|Jeannel R|Chappuis PA hn 179 (MNHN). Native distribution range: Kenya (Mt Kenya).

***Helichrysum citrispinum* Delile** – Habit: Shrub or shrubby herb. Habitat: Alpine grasslands, 2900–4321 m. Vouchers: Åke Strid 3560 (S), Hedberg O 262 (S), Hedberg O 865 (S), Dummer RA 3317(US), Lisowski S 57263 (BR), Lisowski S 57262 (BR). Native distribution range: Ethiopia.

***Helichrysum citrispinum* var. *hoehnelii* (Schweinf.) Hedberg** – Habit: Shrub or shrubby herb. Habitat: Moorland, 3150–4321 m. Vouchers: Hedberg O 262 (K), (BR), Dale IR 3185 (K), Mabberley, D.J. 456 (K), Tweedie 1989 (K), Tweedie R 95 (K), Raumfoid C 502 (K), Synge PM S1902 (BR), Taylor G 3505 (BR). Native distribution range: Ethiopia to E Tropical Africa.

***Helichrysum ellipticifolium* Moeser** – Habit: Shrub. Habitat: Montane grassland, swamps in bamboo clearing, 2500–3600 m. Vouchers: (EA). Native distribution range: E Central Tropical Africa, Kenya.

***Helichrysum foetidum* Moench** – Habit: Herb. Habitat: Woodland, montane forest, 1750–3150 m. Vouchers: Gerh Lindblom (S), Rono et al. SAJIT-PR 0158 (EA, HIB). Native distribution range: Tropical & S Africa, Madagascar, Arabian Peninsula.

***Helichrysum formosissimum* Sch.Bip.** – Habit: Shrub. Habitat: Roadside, alpine zone, burnt grassland in moorland, 2300–4200 m. Vouchers: Dummer RA 3320 (K), Hedberg O 179 (S), Hedberg O 845 (S), Holm Å 65 (S), Thomas AS 2708 (MNHN), Taylor G 3612 (S), Arambourg C|Jeannel R|Chapuis PA 89, 178, 177 (P), Rono et al. SAJIT-PR 0253 (EA, HIB). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Helichrysum forskahlii* (J.F.Gmel.) Hilliard & B.L.Burtt** – Habit: Herb or shrub. Habitat: Alpine grassland, bushland, bamboo, forest and heath, 1750–4321 m. Vouchers: Tweedie 114 (EA), Kokwaro JO 2465 (EA), Hedberg O 1953 (EA), Dale IR 3212 (EA), Rono et al. SAJIT-PR 0252 (EA, HIB). Native distribution range: Tropical Africa, Comoros, SW Arabian Peninsula.

***Helichrysum forskahlii* var. *compactum* (Vatke) Mesfin** – Habit: Herb. Habitat: Moorland grassland, tussock grassland, bushland, 2800–4300 m. Vouchers: Snowden JD 476 (EA), Dale 3212 (K), Knox EB 3757 (K), Kokwaro JO 2465 (EA), Tweedie DR 7 (EA), Major C & Lugard EJ 392 (EA), Smith SAL; Beentje HJ; Muasya AM 165 (K), 176 (K), Hedberg O 972 (K). Native distribution range: Ethiopia to Tanzania.

***Helichrysum globosum* Sch.Bip.** – Habit: herb. Habitat: Upland grassland, riverine forest, bamboo glades, 1200–3100 m. Vouchers: Mwangangi OM 476 (EA), Tothill BH 2362 (EA), Rono et al. SAJIT-PR 0166 (EA, HIB). Native distribution range: Nigeria to Ethiopia and S Tropical Africa, Madagascar.

***Helichrysum kilimanjari* Oliv.** – Habit: Herb. Habitat: Disturbed burnt alpine zone, 2800–4000 m. Vouchers: Åke Strid 3428 (S), Hedberg O 890 (S), Granvik H 113 (S), Holm Å 66 (S). Native distribution range: Kenya to S Tropical Africa.

EX***Helichrysum luteoalbum* (L.) Rchb.** – Habit: Herb. Habitat: Montane grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Old World.

***Helichrysum maranguense* O.Hoffm.** – Habit: Scrambling Shrub. Habitat: Montane rain forest, bamboo zone, 1950–3600 m. Vouchers: Irwin PH 147 (EA), Beentje HJ 1997 (WAG), Agnew, ADQ 7260 (WAG), Dummer RA 3591 (EA), Rono et

al. SAJIT-PR 0198, SAJIT-PR 0237 (EA, HIB). Native distribution range: South Sudan to E Central & E Tropical Africa.

*****Helichrysum meyeri-johannis* Engl.** – Habit: Herb. Habitat: Forest, afro alpine grassland, 2250–4321 m. Vouchers: Thomas AS 605, Tothill BH 2405, Thomas AS 2677, Mwangangi OM 322 (WAG, BR), Åke Strid 3427 (S), Hedberg O 130 (S), Gerh Lindblom (S), Arambourg C|Jeannel R|Chapuis PA 83 (P), Lisowski S 57256 (BR), Williams JG 74/19 (BR), Rono et al. SAJIT-PR 0255 (EA, HIB). Native distribution range: E Tropical Africa.

***Helichrysum newii* Oliv. & Hiern** – Habit: Shrub. Habitat: Alpine stony grassland, 3000–4321 m. Vouchers: Hedberg O 968 (S, EA), Tweedie DR 94, 96, 107, 4020 (EA), Taylor G 3721 (EA), Mabberley DJ 453 (EA), Major EJ & Lugard C (EA), Gardner HM 2275 (EA), Bickford N 35 (EA), Gillett JB 18447 (EA), Knox EB 2626, 3758 (EA), Lisowski S 57278, 57279 (BR). Native distribution range: E Central & E Tropical Africa.

***Helichrysum nudifolium* (L.) Less.** – Habit: Herb. Habitat: Wet savanna, 1750–2900 m. Voucher: Holm Å 66 (S). Native distribution range: Cameroon to Ethiopia and S Africa, W Yemen.

***Helichrysum nudifolium* var. *oxyphyllum* (DC.) Beentje** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Irwin PH 15 (BR). Native distribution range: Cameroon to Uganda and S Africa.

***Helichrysum odoratissimum* Sweet** – Habit: Herb. Habitat: Montane grassland, bushland, giant heat zones, forest margin, 1000–4000 m. Vouchers: Dummer RA 3607 (K), Granvik H 29 (S), Taiti S 5 (BR, EA), Taylor G 3790 (EA), Tweedie R 15 (EA), Joy Adamson 492 (EA), Katende T; Sheil D 980 (K), 2071 (K), Irwin PH 51 (S), Katende 916 (K), Tothill BH 2367 (EA). Native distribution range: Tropical & S Africa.

[EX]***Helichrysum panduratum* O.Hoffm. ex De Wild. & T.Durand** – Habit: Shrub. Habitat: Forest, 1600–2900 m. Voucher: Aldasoro J AS-65 (BC). Native distribution range: Gabon to Rwanda and S Africa.

***Helichrysum schimperi* (Sch.Bip. ex A.Rich.) Moeser** – Habit: Shrub. Habitat: Montane grassland, secondary bushland, riverine forest, giant heath zones, 1600–3400 m. Vouchers: Dale 3416 (BR), Beentje HJ 1937 (WAG), Lisowski S 57312 (WAG, BR), Agnew ADQ; Agnew S 7255 (WAG), Taylor G 3741 (S), Snowden JD 812 (P), Mwangangi OM 474 (BR), Synge PM S871 (BR), Wood G 152 (EA), Rono et al. SAJIT-PR 0214 (EA, HIB). Native distribution range: Eritrea to S Tropical Africa, Socotra, SW Arabian Peninsula.

[EX]***Helichrysum setosum* Harv.** – Habit: Herb. Habitat: Montane Forest, 1900–2750 m. Vouchers: Tweedie DR (BR, S), Mwangangi OM 415 (BR). Native distribution range: S Tropical & S Africa.

[EX]***Helichrysum stenopterum* DC.** – Habit: Herb. Habitat: Montane grassland, forest, bamboo and heath zone, 600–2800 m. Vouchers: Kisalye N; van Heist M 405 (K), Naiga 714 (K), Aldasoro J AS-50 (BC), Rono et al. SAJIT-PR 0167 (EA, HIB). Native distribution range: Bioko, S Tropical & S Africa.

***Helichrysum traversii* Chiov.** – Habit: Herb or shrub. Habitat: Woodland edges, 1750–3000 m. Vouchers: Irwin PH 142 (EA). Native distribution range: Ethiopia to Tanzania.

***Hilliardiella smithiana* (Less.) H.Rob.** – Habit: Herb. Habitat: Wooded grassland especially on regularly burnt regions, 1350–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Hoffmannanthus abbotianus* (O.Hoffm.) H.Rob., S.C.Keeley & Skvarla** – Habit: Shrub or small tree. Habitat: Forest edges, riverine forest, 1000–2400 m. Vouchers: Tweedie (1976), Upland flowers and ferns. Native distribution range: Uganda to S Tropical Africa.

***Inula mannii* (Hook.f.) Oliv. & Hiern** – Habit: Herb. Habitat: Montane Forest edge, afro-alpine bamboo, scrub, 1700–3350 m. Voucher: Maitland TD sn (BR). Native distribution range: Cameroon to Ethiopia and S Tropical Africa.

***Kleinia abyssinica* (A.Rich.) A.Berger** – Habit: Herb. Habitat: Grassland with scattered trees, wooded grassland, 1600–2800 m. Vouchers: Holm Å 60 (S), Rono et al. SAJIT-PR 0219 (EA, HIB). Native distribution range: Tropical Africa.

***Kleinia petraea* (R.E.Fr.) C.Jeffrey** – Habit: Herb. Habitat: Outcrop rock, grassland, bushland, 1800–2450 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya to Tanzania.

***Lactuca glandulifera* Hook.f.** – Habit: Herb. Habitat: Montane rain forest margin, grassland, bushland, giant heath, 1900–3600 m. Voucher: Dummer RA 3542 (K). Native distribution range: Tropical Africa.

***Lactuca inermis* Forssk.** – Habit: Herb. Habitat: Grassland, disturbed ground along roadside, 500–3450 m. Voucher: Arambourg C|Jeannel R|Chappuis PA 109 (MNHN). Native distribution range: Tropical & S Africa, Madagascar, Arabian Peninsula.

***Lactuca paradoxa* Sch.Bip. ex A.Rich.** – Habit: Herb. Habitat: Forest margins, riverine vegetation, thickets, 1950–2650 m. Vouchers: Dummer RA 3639 (EA) Native distribution range: Ethiopia to Malawi.

***Laggera brevipes* Oliv. & Hiern** – Habit: Herb. Habitat: Disturbed upland grasslands and forest edges, 1050–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Uganda to S Tropical Africa, Madagascar.

***Laggera crispata* (Vahl) Hepper & J.R.I.Wood** – Habit: Herb. Habitat: Waste ground, moist grassland, wooded grassland, 150–2550 m. Voucher: Tweedie 2507 (EA), Rono et al. SAJIT-PR 0156 (EA, HIB). Native distribution range: Tropical & Subtropical Old World.

***Laggera elatior* R.E.Fr.** – Habit: Herb. Habitat: Wet montane forest margins, bamboo zones, in *Hagenia* woodland, 1600–3300 m. Vouchers: Dummer 3694 (EA), Åke Strid 3414 (S), Hedberg O 152 (UPS). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Launaea cornuta* (Hochst. ex Oliv. & Hiern) C.Jeffrey** – Habit: Herb. Habitat: Wet savanna, grassland, cultivations and ruderal sites, 1750–2300 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Nigeria to Eritrea and S Tropical Africa.

***Launaea nana* (Bak.) Chiov.** – Habit: Herb. Habitat: Burnt wooded grassland, wet grassland, 1800–2600 m. Voucher: Lugard & Lugard 518 (EA). Native distribution range: Tropical & S Africa.

***Linzia gerberiformis* (Oliv. & Hiern) H.Rob.** – Habit: Herb. Habitat: Burnt grassland, 1100–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Linzia ituriensis* (Muschl.) H.Rob.** – Habit: Woody herb. Habitat: Forest, 1200–2550 m. Voucher: Lisowski S 57143 (BR). Native distribution range: Cameroon to South Sudan and Tanzania.

***Lipotriche pungens* (Oliv. & Hiern) Orchard** – Habit: Herb. Habitat: Wooded grassland, 1650–2300 m. Voucher: Tweedie 459 (BR, EA). Native distribution range: Tropical Africa to Namibia.

***Micractis bojeri* DC.** – Habit: Herb. Habitat: Streamside in grassland or forest, seasonally flooded grassland, 1700–2700 m. Vouchers: Dummer RA 3599 (S), Tweedie 884 (BR). Native distribution range: Nigeria to Ethiopia and Malawi, Madagascar.

***Microglossa densiflora* Hook.f.** – Habit: Shrub. Habitat: Disturbed forests, 1700–2800 m. Vouchers: Hedberg O 84 (UPS), Dummer RA 3615 (EA). Native distribution range: Tropical Africa.

***Microglossa pyrifolia* (Lam.) Kuntze** – Habit: Shrub. Habitat: woodland, 1750–2650 m. Voucher: Tweedie 1532 (EA). Native distribution range: Tropical & Subtropical Old World.

EX***Mikania cordata* (Burm.f.) B.L.Rob.** – Habit: Shrub or subshrub, liane. Habitat: Riverine Forest, 0–3000 m. Voucher: Dawkins HC 780 (K), Rono et al. SAJIT-PR 0184 (EA, HIB). Native distribution range: Tropical Old World.

***Mikaniopsis bambuseti* (R.E.Fr.) C.Jeffrey** – Habit: Subshrub. Habitat: Montane forest, bamboo forest, 260–31500 m. Voucher: Wesche K 1982 (K), 474, 691 (EA). Native distribution range: Kenya to Uganda.

EX***Mikaniopsis clematoides* (Sch.Bip. ex A.Rich.) Milne-Redh.** – Habit: Subshrub. Habitat: Forest, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia.

***Monactinocephalus paniculatus* Klatt** – Habit: Herb. Habitat: Wooded upland grassland, 1590–2500 m. Voucher: Tweedie 1466 (EA). Native distribution range: Ethiopia to S Africa.

***Nidorella aegyptiaca* (L.) J.C.Manning & Goldblatt** – Habit: Herb. Habitat: Wet savanna, 1750–2600 m. Voucher: Lugard C & Lugard EJ 210 (EA). Native distribution range: Africa to Indo-China.

***Nidorella vernonioides* Sch.Bip. ex A.Rich.** – Habit: Shrub or small weak tree. Habitat: Upper mountain steep slopes, bamboo zone, 3500–4000 m. Vouchers: Thomas AS 555 (EA), Mwangangi OM 366 (EA), Taylor G 3670 (EA), Holm Å 52, 53 (S), Taylor G 3683 (S), Arambourg C|Jeannel R|Chappuis PA 157 158 (MNHN). Native distribution range: Djibouti to E Central & E Tropical Africa.

***Nidorella welwitschii* S.Moore** – Habit: Herb or shrub. Habitat: Grassland, alpine zone, moorland, 1800–4321 m. Voucher: Tweedie 20 (EA), Taylor 3521 (EA). Native distribution range: South Sudan to S Tropical Africa.

***Orbivestus karaguensis* (Oliv. & Hiern) H.Rob.** – Habit: Herb or weak shrub. Habitat: Wooded grassland, grassland, forest margins, old cultivations, 1200–2850 m. Vouchers: Hedberg O 1073 (UPS), Holm Å 72 (S). Native distribution range: Ethiopia to S Tropical Africa.

***Orbivestus turbinata* (Oliv. & Hiern ex Oliv.) H.Rob.** – Habit: Herb. Habitat: Wooded grassland, grassland, 1400–2400 m. Voucher: Irwin PH 56 (S, BR). Native distribution range: DR Congo to Ethiopia and Kenya.

***Osteospermum vaillantii* (Decne.) Norl.** – Habit: Herb. Habitat: Woodland, forest edge, 600–3150 m. Vouchers: Bamps PRJ 6502 (BR), Tweedie (S). Native distribution range: S Jordan to NE & E Tropical Africa, Arabian Peninsula.

***Piloselloides hirsuta* (Forssk.) C.Jeffrey ex Cufod.** – Habit: Herb. Habitat: Upland forest, grasslands, woodlands, heath and moor, 1500–3700 m. Vouchers: Hedberg O 847 (S), Irwin PH 1001 (BR). Native distribution range: Tropical & S Africa to China and Indo-China, Lesser Sunda Islands (Bali).

****Senecio crispatipilosus* C.Jeffrey** – Habit: Herb. Habitat: Bamboo Forest, heath zone, 2050–3050 m. Vouchers: Wesche K 601 (K), Tothill BH T2372 (K), T2290 (K), 2372 (K), Dummer RA 3598 (K). Native distribution range: Uganda to Kenya.

***Senecio hadiensis* Forssk.** – Habit: Herb or shrub succulent trailer or climber. Habitat: Upland forest edges, 1000–2600 m. Vouchers: Irwin PH 74 (S), Rono et al. SAJIT-PR 0031 (EA, HIB). Native distribution range: Eritrea to Zimbabwe, Madagascar, Arabian Peninsula.

***Senecio hochstetteri* Sch.Bip. ex A.Rich.** – Habit: Herb or shrub with woody ascending stems. Habitat: Grassland, forest margin, wooded grassland, 1200–3700 m. Vouchers: Major EJ; Lugard C 541 (K, EA), Irwin PH 141 (K), Tweedie 1175 (K). Native distribution range: Tropical & S Africa.

*****Senecio jacksonii* S.Moore** – Habit: Herb. Habitat: Alpine zone, outcrop rock, 3250–4150 m. Vouchers: Mwangangi OM 315 (WAG), (K), Wesche K 30 (K), Lye KA; Pocs T 23089 (K), Tweedie R 8 (K), Hedberg O 4485 (EA, K), Liebenberg LCC 1583 (EA, K) Ekkens DB 401 (EA), Adamson J 466 (EA), Tothill BH 2416 (EA). Native distribution range: Uganda to Kenya (Mt Elgon).

****Senecio moorei* R.E.Fr.** – Habit: Woody herb or shrub. Habitat: Grassland, forest clearing, 1800–3500 m. Vouchers: Wood G 153 (EA), Rono et al. SAJIT-PR 0236 (EA, HIB). Native distribution range: Kenya to Uganda.

*****Senecio rhammatophyllus* Mattf.** – Habit: Shrub. Habitat: Moorland with grassland and giant heath, forest edges, 3000–4150 m. Vouchers: Taylor G 3500 (EA), Wesche K 90 (K), Hedberg O 866 (K), (S), Lugard C 306 (EA, K), Osmaston HA 4000 (K), Saunder &Hancock 57, Osmaston 4000 (EA), Hedberg 4513 (EA). Native distribution range: Uganda to Kenya (Mt Elgon).

***Senecio ruwenzoriensis* S.Moore** – Habit: Herb. Habitat: Wooded grassland, shallow soil among rocks, cultivations, 1700–3000 m. Vouchers: Polhill 401 (EA), Hedberg O 811 (UPS). Native distribution range: Tropical & S Africa.

*****Senecio snowdenii* Hutch.** – Habit: Herb. Habitat: Clearing from bamboo zone, grassland, 2700–4250 m. Vouchers: Lind EM 2086 (EA), Friedberg A 146 (EA), Gardner HM 2268 (K), Mwangangi OM 320 (K), Townsend CC 2328 (K), Smith

SAL; Beentje, Muasya AM 175 (K), Wesche K 4 (K), Hedberg O 227 (K), Gillett 1867 (EA), Tothill BH 2314 (EA), Thomas AS 2681 (EA), Hedberg 4455 (EA). Native distribution range: Uganda to Kenya (Mt Elgon).

*****Senecio sotikensis* S.Moore** – Habit: Woody herb or soft shrub. Habitat: Marshy grassland, 3000–4300 m. Vouchers: Lugard C; Lugard EJ 416 (EA, K), Adamson J 481 (EA), Hedberg O 871 (EA), Kokwaro JO 2464 (EA), Gillett JB 18435, (BR), Kokwaro JO 2464 (K), Gillett JB 18435 (K), Snowden JD 482 (K), Wesche K 207 (K), Hedberg O 4453 (UPS), Dummer RA 3324 (EA), Lye et al. 5726 (EA). Native distribution range: Uganda to Kenya (Mt Elgon).

***Senecio syringifolius* O.Hoffm.** – Habit: Twining liana. Habitat: Montane forest, bamboo zone, 1500–3300 m. Voucher: Hedberg O 58 (S). Native distribution range: Kenya to S Tropical Africa.

***Seriphium kilimandscharicum* (O.Hoffm.) Koek.** – Habit: Herb. Habitat: Heath zone, moorland, upper forest edge, (1950–)2400–3900 m. Vouchers: Tweedie EM 1297 (K), Lisowski S 54497 (BR), Dummer RA 3532 (P), Snowden JD 803 (P), Taiti S 582 (EA), Hedberg O 134 (S). Native distribution range: Uganda to N Malawi.

**[EX]*Solanecio angulatus* (Vahl) C.Jeffrey** – Habit: Succulent herb. Habitat: Upland forest, woodland edges, riverine and streams, 1000–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Mayotte, Madagascar, SW Arabian Peninsula.

**[EX]*Solanecio mannii* (Hook.f.) C.Jeffrey** – Habit: Shrub or small tree. Habitat: Disturbed forest, 1400–2700 m. Vouchers: Hedberg O 55 (S), Taylor G 3436 (S), Synge PM S 104 (S), Bamps PRJ 6501 (BR). Native distribution range: Nigeria to Ethiopia and S Tropical Africa.

***Solanecio tuberosus* (Sch.Bip. ex A.Rich.) C.Jeffrey** – Habit: Herb. Habitat: Swampy grassland, 1200–2000 m. Voucher: Tweedie DR 162 (K). Native distribution range: Eritrea to Uganda.

***Sonchus afromontanus* R.E.Fr.** – Habit: Herb. Habitat: Grassland, along streamside, forest clearing, 2200–3700 m. Vouchers: Lye 5734 (EA), Tweedie 24 (EA), Tweedie R 25 (K), Tweedie 2550 (K). Native distribution range: E Central & E Tropical Africa.

**[EX]*Sonchus asper* (L.) Hill** – Habit: Herb. Habitat: Wet savanna, cultivation, 1750–2550 m. Voucher: Tweedie 1336 (EA). Native distribution range: Temperate Eurasia, N Africa to Sahel and Somalia.

***Sonchus bipontini* Asch.** – Habit: Herb. Habitat: Wooded grassland, bamboo zone, 1700–3370 m. Vouchers: Hedberg O 66 (K), Tweedie 888 (K), Mwangangi OM 392 (K), Kokwaro JO 2448 (K), Hooper SS; Townsend CC 1389 (K), Hemp A 5416 (W). Native distribution range: Ethiopia to S Tropical Africa.

****Sonchus camporum* (R.E.Fr.) Boulos ex C.Jeffrey** – Habit: Herb. Habitat: Rare in upland burnt grassland, 1800–2300 m. Voucher: Lugard & Lugard 546 (K). Native distribution range: Kenya.

***Sonchus luxurians* (R.E.Fr.) C.Jeffrey** – Habit: Herb. Habitat: Roadsides, grassland, montane forest, 1600–3800 m. Voucher: Rono et al. SAJIT-PR 0155 (EA, HIB). Native distribution range: Ethiopia to Burundi and Mozambique.

[EX]***Sonchus oleraceus* L.** – Habit: Herb. Habitat: Roadsides, cultivations, 1500–2700 m. Voucher: Major EJ & Lugard C 457 (EA). Native distribution range: Macaronesia, Europe to Mediterranean, Sahara to Arabian Peninsula.

***Sonchus schweinfurthii* Oliv. & Hiern** – Habit: Herb. Habitat: Grassland, weed of cultivtion, roadside, 1700–2800 m. Vouchers: Mwangangi OM 392 (BR), Agnew ADQ; Agnew S 7250 (WAG). Native distribution range: Tropical Africa.

[*]***Sonchus stenophyllus* R.E.Fr.** – Habit: Herb. Habitat: Forest glades, grassland, 1700–3300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to Tanzania.

***Sphaeranthus suaveolens* DC.** – Habit: Herb. Habitat: Near fresh stream beds, wet savanna, 1200–2500 m. Vouchers: Beentje HJ 1963 (WAG), Hedberg O 1953 (S), Holm Å 74 (S), Small W 1184 (K). Native distribution range: N Sinai, Egypt to S Tropical Africa.

[EX]***Tagetes minuta* L.** – Habit: Herb. Habitat: Upland arable land, wet savanna, 850–2750 m. Voucher: Hedberg O 6 (S). Native distribution range: Brazil to S South America.

***Vernonella chthonocephala* (O.Hoffm.) H.Rob. & Skvarla** – Habit: Herb. Habitat: Seasonally burnt grasslands, 1050–2100 m. Voucher: James (EA). Native distribution range: Tropical Africa.

***Vernonia galamensis* (Cass.) Less.** – Habit: Herb. Habitat: Woodland edges, 800–2800 m. Vouchers: Tweedie 726 (K), Lugard C; Lugard EJ 252 (K), Bridson DM 70 (WAG), Smith CE; Njoroge D 4640 (K). Native distribution range: Africa.

***Vernonia holstii* O.Hoffm.** – Habit: Herb or shrub. Habitat: Forest margin, secondary bushland, 1000–2100 m. Voucher: Tweedie 3729 (EA). Native distribution range: Cameroon to Kenya and Zimbabwe.

[EX]***Vernonia schweinfurthii* Oliv. & Hiern** – Habit: Herb. Habitat: Wet savanna, short grassland, scattered tree grassland, 1750–2250 m. Voucher: Tweedie 1115 (EA). Native distribution range: Tropical Africa.

***Vernonia syringifolia* O.Hoffm.** – Habit: Woody herb or weak shrub. Habitat: Montane rain forest, forest margin, secondary woodland or bush, 2000–3050 m. Vouchers: Dummer RA 3500 (EA), Agnew ADQ; Agnew S 7283 (WAG), Taylor G 3794 (S), Irwin PH 45 (S). Native distribution range: South Sudan to S Tropical Africa.

## F44. BALSAMINACEAE

1 Genus, 10 species

[**]***Impatiens digitata* subsp. *phlyctidoceras* (Bullock) Grey-Wilson** – Habit: Herb. Habitat: Forest, 3500–3700 m. Vouchers: Sheil|Musinguzi RD 1809 (MO), Dale IR, Dale in FD 3201 (MO), Lugard CE 313 (MO). Native distribution range: E Tropical Africa (Mt Elgon).

**Impatiens digitata* **Warb.** – Habit: Herb. Habitat: Forest floor, moorland, about 3500 m. Voucher: Lugard C 313 (K, EA). Native distribution range: Kenya, Uganda, Tanzania (Mt Kilimanjaro).

***Impatiens hochstetteri* Warb.** – Habit: Herb. Habitat: Stream banks in forest, woodland, 1000–2800 m. Vouchers: Knox EB 2633 (EA), Tweedie EM 3603 (K), Synge PM S1056 (BR), Synge PM S 1037 (WAG), Rono et al. SAJIT-PR 0004 (EA, HIB). Native distribution range: Tropical & S Africa.

***Impatiens meruensis* Gilg** – Habit: Herb. Habitat: streamside, marshes, forest, 1000–3550 m. Vouchers: Knox EB 2640, 3832 (EA), Bridson DM 72 (EA), Jack C 110 (EA), Rono et al. SAJIT-PR 0048 (EA, HIB). Native distribution range: N Tanzania, Kenya, Uganda, Sudan.

**Impatiens meruensis* **subsp.** ***cruciata* (T.C.E.Fr.) Grey-Wilson** – Habit: Herb. Habitat: Moist shaded forest fringes, bushland, bamboo, 2250–3630 m. Vouchers: Wesche K 886 (K), Bridson DM 72 (K), Tweedie 365 (K), Tweedie 1437 (K). Native distribution range: Sudan to Kenya.

***Impatiens miniata* Grey-Wilson** – Habit: Herb. Habitat: Montane forest, forest fringes, bamboo thickets, 2850–3700 m. Vouchers: Tweedie 7A (EA), Thomas AS 510, 225 (EA), Lye 5748 (EA). Native distribution range: E Tropical Africa (Mt Elgon).

***Impatiens sodenii* Engl. & Warb. ex Engl.** – Habit: Herb. Habitat: Escarpment zones and waterfalls, 1000–2700 m. Voucher: Granvik H sn (S). Native distribution range: Kenya to N & E Tanzania.

***Impatiens tinctoria* A.Rich.** – Habit: Herb. Habitat: Waterfalls and stream banks, forests, 1800–3630 m. Vouchers: Knox EB 2639 (EA), Rono et al. SAJIT-PR 0043 (EA, HIB). Native distribution range: Eritrea to N Uganda.

***Impatiens tinctoria* subsp.** ***elegantissima* (Gilg) Grey-Wilson** – Habit: Herb. Habitat: Outcrop rock, forest, 1800–3000 m. Vouchers: Tweedie (K), Lind EM 437 (K), Snowden JD 507 (K), Bridson DM 73 (K). Native distribution range: SE Uganda to Kenya.

***Impatiens tweedieae* E.A.Bruce** – Habit: Herb. Habitat: Forest and forest floor, upland grassland, 3000–3750 m. Vouchers: Wesche K 1926 (MO), Synge 891 (EA), Morrison MES 258a (MO), Tweedie 366 (MO, BR), 367 (K), Adamson 53 (EA), Adamson J 503 (MO), Thomas AS 2709 (MO), Thomas AS 585 (MO), 2709 (EA), Tweedie EM 367 (MO), Taylor 3737 (S). Native distribution range: E Tropical Africa (Mt Elgon).

## F45. BASELLACEAE

1 Genus, 1 species

*EX Basella alba* **L.** – Habit: Herb or shrub. Habitat: Riverine forest, forest edges, margins of cultivated land, 1500–3000 m. Vouchers: Tweedie 2043 (EA), Irwin PH 526 (EA). Native distribution range: Tropical Asia.

## F46. BEGONIACEAE

1 Genus, 1 species

***Begonia wollastonii* Baker f.** – Habit: Herb. Habitat: Spray of waterfall, forest, 1750–2900 m. Vouchers: Thomas AS 2578 (EA), Wesche 600 (EA), Tweedie 1485 (EA), Synge PM 1036 (WAG). Native distribution range: Ethiopia to SW Tanzania.

## F47. BIGNONIACEAE

3 Genera, 4 species

***Kigelia africana* (Lam.) Benth.** – Habit: Tree. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa

***Kigelia africana* subsp. *moosa* (Sprague) Bidgood & Verdc.** – Habit: Tree. Habitat: Forest, upland bushland, spray of waterfall, 1750–2400 m. Vouchers: Snowden JD 866 (EA, MO). Native distribution range: Tropical Africa.

***Markhamia lutea* K.Schum.** – Habit: Tree. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ghana to South Sudan and Tanzania.

***Stereospermum kunthianum* Cham.** – Habit: Tree or shrub. Habitat: Wet savanna, 1750–2250 m. Voucher: Rwaburindore PK 5621 (MO). Native distribution range: Tropical Africa.

## F48. BORAGINACEAE

6 Genera, 16 species

***Cordia africana* Lam.** – Habit: Shrub or small tree. Habitat: Forest, grassland, 1750–2400 m. Voucher: Snowden JD 926 (EA). Native distribution range: Tropical & S Africa, SW Arabian Peninsula, Comoros, Madagascar.

***Cynoglossum aequinoctiale* T.C.E.Fr.** – Habit: Herb. Habitat: Montane grassland, 1770–2870 m. Vouchers: Irwin PH 12 (K), Saundy; Hancock 95 (EA, K). Native distribution range: Kenya to N Zambia.

***Cynoglossum amplifolium* Hochst. ex A.DC.** – Habit: Herb. Habitat: Grassland, woodland, forest, bamboo zonne, 1800–3430 m. Voucher: Tweedie 4097 (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Cynoglossum amplifolium* var. *subalpinum* (T.C.E.Fr.) Verdc.** – Habit: Herb or subshrub. Habitat: Upper forest edge, acacia woodland, bamboo forest, 1800–3200 m. Voucher: Tweedie 4097 (EA). Native distribution range: Nigeria, Cameroon, SE Ethiopia to Tanzania.

***Cynoglossum cheranganiense* Verdc.** – Habit: Herb. Habitat: Grassland with scattered bamboo, Junipera-Hagenia clumps, 2400–3270 m. Voucher: Wesche K 1644 (EA). Native distribution range: Kenya.

***Cynoglossum coeruleum* Hochst. ex DC.** – Habit: Herb. Habitat: Forest clearing and pathside, 1100–3200 m. Vouchers: Symes YE 241 (EA), Lind EM 430 (EA), Rono et al. SAJIT-PR 0119 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Cynoglossum coeruleum* subsp. *johnstonii* (Baker) Verdc.** – Habit: Herb. Habitat: Grassland, overgrazed grassland, waste ground, 2400–3650 m. Voucher: Bei 66283 (EA). Native distribution range: Cameroon, Ethiopia to N Malawi.

***Cynoglossum coeruleum* subsp. *kenyense* Verdc.** – Habit: Herb. Habitat: Grassland, grassland with scattered trees, 1440–3150 m. Voucher: Symes 241 (EA). Native distribution range: Kenya to N Tanzania.

***Cynoglossum coeruleum* var. *mannii* (Baker & C.H.Wright) Verdc.** – Habit: Herb. Habitat: Submontane forest, swamp, bamboo thickets, margins of cultivated land, 1740–3150 m. Voucher: Dummer RA 3601 (EA). Native distribution range: Cameroon to Ethiopia and S Africa.

***Cynoglossum lanceolatum* Forssk.** – Habit: Herb. Habitat: Weed and in disturbed grasslands, 1100–3220 m. Vouchers: Lugard 175 (EA), Snowden JD 886 (EA), Rono et al. SAJIT-PR 0134 (EA, HIB). Native distribution range: Tropical & S Africa to Tropical & Subtropical Asia.

***Ehretia cymosa* var. *silvatica* (Gurke) Brenan** – Habit: Tree. Habitat: Forest, riverine forest,1750–2250 m. Vouchers: Lugard EJ & Lugard C 554a, Jackson THE 305 (EA), Tweedie 2587 (EA), Jack C 166, 276 (EA). Native distribution range: Eritrea to S Tropical Africa.

***Lithospermum afromontanum* Weim.** – Habit: Herb. Habitat: Montane forest edges, moorland, upper Hagenia- Rapanea woodland, heath zone, 2100–4000 m. Voucher: Dummer RA 3433 (EA). Native distribution range: Ethiopia to South Africa.

***Myosotis abyssinica* Boiss. & Reut.** – Habit: Herb. Habitat: Woodland, forest, grasslands, moorland zone, 2000–3960 m. Voucher: Tweedie 1898 (EA), Hedberg O 187, 4565 (EA). Native distribution range: Bioko to Cameroon, Ethiopia to Tanzania.

***Myosotis keniensis* T.C.E.Fr.** – Habit: Mat-forming herb. Habitat: Grassland tussock in dendrosenecio associations, 3350–4320 m. Voucher: Bie SW 302 (EA). Native distribution range: S Central Ethiopia, Central Kenya.

***Myosotis vestergrenii* Stroh** – Habit: Herb. Habitat: Alpine and heath zone, 2000–4250 m. Vouchers: Bally J 472, Tweedie DR 4, 123 (EA), Trelawny BBR 4467 (EA), Adamson J 472 (EA), Gardner HM 2247 (EA), Hedberg O 215 (EA) Bickford N 6 (EA) Lind EM 2094 (EA), Forbes 259 (EA). Native distribution range: Ethiopia to E Tropical Africa

***Trichodesma physaloides* A.DC.** – Habit: Herb. Habitat: Woodland, wooded grassland, bushland, 1050–2400 m. Vouchers: Tweedie 138 (EA), Snowden JD 821 (EA), Webster MVB 8916 (EA). Native distribution range: Ethiopia to South Africa.

## F49. BRASSICACEAE

11 Genera, 16 species

***Arabidopsis thaliana* (L.) Heynh.** – Habit: Herb. Habitat: Upland bushland and moor, disturbed alpine grassland, 1750–4250 m. Voucher: Sound & Hancock 39 (EA), Tothill BH 2450 (EA), Hedberg 943 (EA). Native distribution range: Temperate Eurasia to Tropical African Mountains.

***Arabis alpina* L.** – Habit: Herb. Habitat: Upland moor, stream banks, cliffs, 2450–4321 m. Vouchers: Taylor 3531 (EA), Wesche K 206 (K), 1247 (EA), Dummer RA 3438 (K), Hedberg O 1002 (EA, K), 969 (EA), Townsend CC 2323 (K), Bickford N 16, 43 (EA), Gardner HM 2244 (EA), Adamson J 473 (EA), Tweedie DR 108 (EA), Synge PM 943 (EA). Native distribution range: N and Central Europe to W Central Siberia, N & E Canada to Greenland.

***Barbarea intermedia* Boreau** – Habit: Herb. Habitat: Upland moor, alpine zone, disturbed ground, streamside, 3000–3900 m. Vouchers: Adamson J 495 (K), Hedberg O 1013 (EA, K), Townsend CC 2331 (EA, K), Dale IR 3391 (EA, K), Major EJ; Lugard C 393 (K), Major EJ; Lugard C 419 (K), Ekkens DB 2476 (EA). Native distribution range: Central & S Europe to NW China and E Uganda.

EX***Brassica juncea* (L.) Czern.** – Habit: Herb. Habitat: Cultivation, forest, 1650–2000 m. Voucher: Tweedie 1136A (EA). Native distribution range: North Caucasus, Transcaucus, a cultigen from China.

EX***Brassica napus* L.** – Habit: Herb. Habitat: Shrubland, 1700–2300 m. Vouchers: Tweedie 1136 (EA). Native distribution range: A cultigen from S Europe.

EX***Capsella bursa-pastoris* (L.) Medik.** – Habit: Herb. Habitat: Cultivated grounds, forest, woodland, 1500–2800 m. Vouchers: Stunrock BM 2207 (EA), Beentje HJ 1945 (EA). Native distribution range: Temperate Eurasia, N Africa.

***Cardamine africana* L.** – Habit: Herb. Habitat: Forest, stream side, 2200–3400 m. Vouchers: Hedberg O 5081 (UPS), H 1048 (EA, S), Wesche K 480 (EA). Native distribution range: Tropical & S Africa, India to W Malesia, Central & S Tropical America.

***Cardamine hirsuta* L.** – Habit: Herb. Habitat: Forest, 500–4321 m. Vouchers: Hedberg 268 (EA), Rono et al. SAJIT-PR 0147 (EA, HIB). Native distribution range: Temperate & Subtropical Northern Hemisphere to Tropical African Mountains.

***Cardamine obliqua* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Alpine belt, montane forest, 2000–4321 m. Vouchers: Hedberg O 862 (K), 4464 (EA), 4521 (EA, K), Bush RZ 249 (EA), Bickford N 57 (EA), Irwin PH 361 (EA), Major C & Lugard EJ 355 (EA), Synge 958 (EA), Tweedie DR 70 (EA). Native distribution range: Ethiopia to Tanzania, Mexico to Ecuador.

***Cardamine trichocarpa* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Roadside, forest clearings, 950–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: S Cameroon to Ethiopia and Tanzania, South Africa, India to Assam, Sri Lanka.

***Crambe kilimandscharica* O.E.Schulz** – Habit: Herb. Habitat: Grassland, forest clearing, weed in cultivated land, 1200–3400 m. Vouchers: Hedberg KO 4474 (EA, BR), Muthoka P & Kirika P 1178 (EA). Native distribution range: S Ethiopia to E DR Congo.

***Erucastrum arabicum* Fisch. & C.A.Mey.** – Habit: Herb. Habitat: Wet savanna, woodland, 1750–3170 m. Voucher: Symes YE 119 (EA). Native distribution range: Egypt to Namibia, Arabian Peninsula.

***Erucastrum elgonense* Jonsell** – Habit: Herb. Habitat: Montane forest, ericaceous scrub, 3050–3400 m. Vouchers: Thomas AS 586 (EA), Tothill BH 2346 (EA), Hedberg Olov 4475 (UPS, EA, K). Native distribution range: Uganda (Mt Elgon).

[EX]***Mummenhoffia alliacea* (L.) Esmailbegi & Al-Shehbaz** – Habit: Herb. Habitat: Montane forests, upland moor, stream banks, bamboo, 3000–3600 m. Voucher: Hedberg 997 (EA). Native distribution range: E Central & S Europe to N Turkey.

***Oreophyton falcatum* O.E.Schulz** – Habit: Herb. Habitat: Alpine zone, rock crevices, 3800–4321 m. Vouchers: Hedberg in Adamson J 500 & Hedberg 978 (EA), Tweedie 70 (EA). Native distribution range: Ethiopia to E Central & E Tropical African Mountains.

***Subularia monticola* A.Braun ex Schweinf.** – Habit: Tufted herb. Habitat: Upland rain-forest, moorland, ericaceous and alpine zone, 2750–4321 m. Vouchers: Hedberg 1016 (EA), Synge PM 886 (EA), Wesche K 1941 (EA). Native distribution range: Mountains of Ethiopia to E DR Congo and N Tanzania.

## F50. CAMPANULACEAE

4 Genera, 24 species

***Canarina abyssinica* Engl.** – Habit: Climbing herb. Habitat: Forest, wooded grassland, along streams, 1925–2300 m. Vouchers: Tweedie 860 (EA), Lind EM 262 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Canarina eminii* Asch. & Schweinf.** – Habit: Climbing (or hanging if epiphyte) herb. Habitat: Montane Forest, Outcrop rocks, 1600–3200 m. Vouchers: Hedberg 158 (EA), Thomson 2253 (EA), Rwaburindore PK 469 (WAG), Norman EM 223 (K), Andersen 327 (S), Granvik H 331 (S). Native distribution range: Ethiopia to N Malawi.

**Lobelia aberdarica* R.E.Fr. & T.C.E.Fr.** – Habit: Shrub. Habitat: Swamps in the moorland, 1860–3500 m. Vouchers: Dale IR 3200 (EA), Awich Y 607 (EA), Major C & Lugard EJ 434 (EA), Tweedie R 109 (EA), Knox EB 3769, 3768, 3767, 2615 (EA), Hedberg O 1045 (S), Thomas AS 654 (EA), Synge 872 (EA), Hedberg 4536 (EA). Native distribution range: E Tropical Africa (Aberdare Range).

***Lobelia cheranganiensis* Thulin** – Habit: Trailing herb. Habitat: Upland Forest and moor, 2750–3300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya.

***Lobelia duriprati* T.C.E.Fr.** – Habit: Herb. Habitat: Wet montane short grassland, 1700–3550 m. Voucher: Rono et al. SAJIT-PR 0109 (EA, HIB). Native distribution range: E Tropical Africa.

***Lobelia fervens* Thunb.** – Habit: Herb. Habitat: Wet savanna, woodland, upper forest edge, 1750–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to S Tropical Africa, W Indian Ocean.

***Lobelia flaccida* A.DC.** – Habit: Herb. Habitat: Grassland, forest margin, 1220–3150 m. Vouchers: Tweedie DR 33 (EA), Knox EB 2607, 2631, 2638, 2643, 3833 (EA), Beentje HJ 1936 (EA), Webster MVB 8909 (EA), Gilbert MG & Tadesse M 6553 (EA), Symes YE 415 (EA), Bitsford N 49 (EA), Granvik H 254 (S). Native distribution range: Sudan to S Africa.

***Lobelia flaccida* subsp. *granvikii* (T.C.E.Fr.) Thulin** – Habit: Herb. Habitat: Forest, grassland, 1524 m. Vouchers: Lugard E 149 (K), Dummer RA 3722 (K). Native distribution range: South Sudan to Kenya.

***Lobelia giberroa* Hemsl.** – Habit: Shrub. Habitat: Disturbed places of montane forests, 1590–3000 m. Voucher: Dummer RA 3575 (US). Native distribution range: Eritrea to Zambia.

****Lobelia gregoriana* subsp. *elgonensis* (R.E.Fr. & T.C.E.Fr.) E.B.Knox** – Habit: Herb. Habitat: Upland forest, moorland, 3450–4200 m. Vouchers: Adamson J 499 (EA), Hedberg KO 922 (MO, EA), Synge PM 911 (EA, MO), Lindblom sn (K), Liebenberg LCC 1674 (EA, MO), Katende AB 318 (MO), Dale U70 (EA). Native distribution range: E Tropical Africa (Cherangani Hills & Mt Elgon).

[EX]***Lobelia heyneana* Roem. & Schult.** – Habit: Herb. Habitat: Woodland, lower and upper forest edge, 1750–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to Zambia, Arabian Peninsula, China (Yunnan) to Tropical Asia.

***Lobelia inconspicua* A.Rich.** – Habit: Herb. Habitat: Short grassland and disturbed grounds, 1220–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

****Lobelia lindblomii* Mildbr.** – Habit: Creeping/ mat-forming herb. Habitat: Alpine and subalpine grassland, 3100–4250 m. Vouchers: Hedberg 123, 4499 (EA), Major EJ; Lugard C 432 (K), 433 (K), Tweedie DR 4017 (K), Adamson J 502 (K), Mabberley DJ 468 (EA, K), Knox EB 3837 (EA), Williams Y & Beentje 1999 (EA), Rauh W 586 (EA), Bickford N 6 (EA), Thomas AS 602 (EA), Wood 111 (EA). Native distribution range: E Tropical Africa (Aberdare Mountains, Mt Elgon).

***Lobelia minutula* Engl.** – Habit: Herb. Habitat: Upland grassland, moorland, forest margin, 2125–3350 m. Voucher: Ekkens DB 415 (EA). Native distribution range: Cameroon to E Tropical Africa.

***Lobelia neumannii* T.C.E.Fr.** – Habit: Herb. Habitat: Upland grassland, 1850–2750 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon, Ethiopia to Kenya.

****Lobelia telekii* Schweinf.** – Habit: Herb. Habitat: Wet stony grounds in moorlands, 3000–5000 m. Vouchers: Tweedie DR 26 (EA), Synge PM 5901 (EA, BR), Hedberg O 861 (EA) Mwangangi OM 338 (EA), Ekkens DB 776 (EA), Honore EJ 2519 (EA), Dale IR 3194 (EA), Knox EB 2624 (EA), Tothill BH 2412 (BR, EA), Eggeling WJ 5751 (EA), Dummer RA 3385 (US, UPS), Tweedie DR Mrs 8 (K), Liebenberg LCC 1617 (EA), Thomas AS 629 (EA). Native distribution range: E Tropical Africa (Aberdare Range, Mt Kenya, Mt Elgon).

***Monopsis stellarioides* Urb.** – Habit: Trailing herb. Habitat: Paddock, roadside, alpine grassland, 1650–3600 m. Vouchers: Symes YE 519 (EA), Hedberg O 909 (EA), Webster MVB 8912 (EA), Beentje HJ 1964 (EA), KnoX EB 3834 (EA), Tweedie EM 126 (K). Native distribution range: Tropical & S Africa, Comoros

***Wahlenbergia capillacea* A.DC.** – Habit: Herb. Habitat: Grassland, bamboo zone, 2300–3500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to S Africa.

***Wahlenbergia hirsuta* (Edgew.) Tuyn** – Habit: Herb. Habitat: Grassland, woodland, waste land, roadside, 1650–2120 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa to Himalaya.

***Wahlenbergia krebsii* Cham.** – Habit: Herb. Habitat: Grassland, Lower alpine and heath zones, upper forest margins, 2130–3600 m. Vouchers: Dummer RA 3515 (US), Rono et al. SAJIT-PR 0143, SAJIT-PR 0265 (EA, HIB). Native distribution range: Bioko to Ethiopia and S Africa.

***Wahlenbergia napiformis* (A.DC.) Thulin** – Habit: Herb. Habitat: Wet savanna, grassland, old cultivations, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Central African Republic to Ethiopia and Namibia.

***Wahlenbergia pusilla* Hochst. ex A.Rich** – Habit: Mat forming Herb. Habitat: Alpine and moor zone, 2800–4300 m. Vouchers: Hedberg O 140 (K) 3250 (EA), Wesche K 329 (K), Taylor G 3536 (BR). Native distribution range: Ethiopia to Tanzania.

***Wahlenbergia silenoides* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Montane grassland, moorland, forest margin, 2200–3350 m. Voucher: Tweedie 3534 (EA). Native distribution range: Nigeria to Ethiopia and Tanzania.

***Wahlenbergia virgata* Engl.** – Habit: Herb. Habitat: Grasslands, 1680–2700 m. Voucher: Hedberg 26 (EA). Native distribution range: Ethiopia to S Africa.

## F51. CANELLACEAE

1 Genus, 1 species

***Warburgia ugandensis* Sprague** – Habit: Tree. Habitat: Riverine, upland forest, wooded grassland, 1600–2400 m. Voucher: Rono et al. SAJIT-PR 0013 (EA, HIB). Native distribution range: SE Ethiopia to Malawi.

## F52. CANNABACEAE

1 Genus, 1 species

***Celtis africana* Burm.f.** – Habit: Tree. Habitat: Forest, 2250–3000 m. Voucher: Rono et al. SAJIT-PR 0042 (EA, HIB). Native distribution range: Tropical & S Africa, SW Arabian Peninsula, Madagascar.

## F53. CAPPARACEAE

3 Genera, 3 species

***Capparis fascicularis* DC.** – Habit: Shrub. Habitat: Grassland, forest edge, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Maerua angolensis* DC.** – Habit: Shrub or small tree. Habitat: Grassland, forest edge, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Ritchiea albersii* Gilg** – Habit: Shrub or tree. Habitat: Upland forest margin, 2250–3000 m. Vouchers: Rono et al. SAJIT-PR 0066 (EA, HIB). Native distribution range: Nigeria to Ethiopia and S Tropical Africa.

## F54. CAPRIFOLIACEAE

4 Genera, 5 species

***Cephalaria pungens* Szabo** – Habit: Herb. Habitat: Montane and subalpine grassland, 2500–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: W Kenya to S Africa.

***Dipsacus pinnatifidus* Steud. ex A.Rich.** – Habit: Herb. Habitat: Upper Forest, lower alpine zone, heath woodland, 2000–3950 m. Vouchers: Hedberg 1027 (EA), Lisowski S 11786 (BR), Liebenberg 1614 (EA), Rono et al. SAJIT-PR 0251 (EA, HIB). Native distribution range: Mountains of NE and E Tropical Africa to DR Congo, Cameroon.

***Scabiosa columbaria* L.** – Habit: Herb. Habitat: Woodland, upland grassland, grass-moor rocky heathland, upper forest bushland, 2200–4000 m. Vouchers: Rono et al. SAJIT-PR 0135 (EA, HIB), Lisowski S 11788 (BR). Native distribution range: Europe to Iran and Arabian Peninsula, NW Africa, Tropical African Mountains.

****Valeriana kilimandscharica* Engl.** – Habit: Herb or subshrub. Habitat: Upland moor, alpine zone, along streams, 2800–4500 m. Vouchers: Hedberg 1549 (EA), Siemens LA 2572 (EA), Adamson J 18226 (EA), 476 (K), Hedberg O 210, 961 (EA), Lugard C & Lugard EJ 2954 (EA), Tweedie DR 73, 119 (EA), Dale IR 3180 (EA, K), Battiscombe E 676 (EA), Lugard EJ 404 (K), Thomas 617 (EA). Native distribution range: E Tropical African Mountains.

***Valeriana volkensii* Engl.** – Habit: Herb. Habitat: Streamside, marshes, bamboo zone, upland forest and upland moor, 2300–3400 m. Vouchers: Irwin PH 313, Hedberg O 257 (S), Synge PM 1872 (S), Tweedie EM 892 (K), Kisalye N; Heist M van 401 (WAG), Gillett JB 18414 (BR), Tothill BH 2357 (EA), Dummer RA 3577 (K). Native distribution range: E Central & E Tropical African Mountains.

## F55. CARYOPHYLLACEAE

6 Genera, 12 species

***Cerastium afromontanum*** **T.C.E.Fr.** – Habit: Prostrate herb. Habitat: Short grassland, upland moor, alpine zone, 2300–4000 m. Vouchers: Friis I & Hansen OJ 2564 (EA), Tweedie 36 (EA), Bickford N 47 (EA), Adamson J 494 (EA), Lugard C 324 (K), Beentje HJ 1981 (EA, WAG), Gillett JB 18455 (K), Dale IR 3203 (EA, K). Native distribution range: South Sudan (Imotong Mountains) to Tanzania.

***Cerastium lanceolatum*** **(Poir.) Volponi** – Habit: herb. Habitat: Forest edge, wet grassland, 1500–3600 m. Vouchers: Hamilton & Perrott 76/524 (EA). Native distribution range: Tropical & S Africa, Réunion, S India, Sri Lanka, S Malesia to New Guinea.

***Cerastium octandrum*** **Hochst. ex A.Rich.** – Habit: Herb. Habitat: Disturbed grassland, upland moor and bushland, 2500–4200 m. Vouchers: Rich A 58(EA), Hedberg O 188, 97(EA). Native distribution range: Cameroon to Eritrea and Tanzania.

EX***Corrigiola litoralis*** **L.** – Habit: Prostrate herb. Habitat: Roadside, disturbed grounds, 2350–3600 m. Voucher: Mwangangi OM 448 (BR). Native distribution range: Europe, S Tropical & S Africa.

***Drymaria cordata*** **(L.) Willd. ex Schult.** – Habit: Straggling soft herb. Habitat: Forest edges, roadsides, 1350–2500 m. Vouchers: Beentje HJ 1927 (EA), Kahuho SK 3 (EA). Native distribution range: Mexico to S Tropical America, Tropical & S Africa.

***Sagina abyssinica*** **Hochst. ex A.Rich.** – Habit: Herb. Habitat: Alpine belt, riverbank, upland moor, 2150–4250 m. Vouchers: Wesche K 1820, 1689 (K), Hedberg O 4548 (EA), Horu PH 364 (EA), Rauh W 591 (EA), Hedberg 870 (S), Lisowski S 80258 (BR). Native distribution range: Bioko to Ethiopia and N Tanzania.

***Sagina afroalpina*** **Hedberg** – Habit: Herb. Habitat: Upland moorland, 3150–4321 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Silene burchellii*** **Otth** – Habit: Herb. Habitat: Upland grassland, forest, moorland, alpine zone, 1900–4050 m. Vouchers: Hedberg O 951 (EA, K, S), Tweedie 72 (EA), Jeaudui DR 116 (EA), Bickford NB 44 (EA), Lisowski S 80284 (BR). Native distribution range: South Africa.

EX***Silene gallica*** **L.** – Habit: Herb. Habitat: Roadside and in cultivation, 1960–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, W Europe to Mediterranean.

*****Silene syngei*** **(Turrill) T.Harris & Goyder** – Habit: Herb. Habitat: Outcrop rock, upland moor 3750 m. Vouchers: Synge PM 1912 (K, MO, NHMUK). Native distribution range: Uganda (Mt Elgon).

EX***Stellaria media*** **(L.) Vill.** – Habit: Trailing herb. Habitat: Montane forest floor, Introduced weed in cultivation, 1250–2520 m. Voucher: Wesche K 1692 (EA). Native distribution range: Temperate Eurasia, N & NE Tropical Africa.

***Stellaria sennii* Chiov.** – Habit: Trailing herb. Habitat: Forest edges, path sides, 1750–3600 m. Voucher: Tweedie 107 (K). Native distribution range: Cameroon, Ethiopia to S Tropical Africa.

## F56. CELASTRACEAE

5 Genera, 7 species

***Catha edulis* (Vahl) Endl.** – Habit: Tree. Habitat: Evergreen forest, woodland on rocky hills, 1100–1800(–2400) m. Vouchers: Snowden JD 872 (EA), Eggeling WJ 2478 (BR), Snowden JD 966 (BR), Styles B 302 (BR). Native distribution range: Eritrea to S Africa, Yemen.

***Elaeodendron buchananii* Loes.** – Habit: Shrub or tree. Habitat: Forest, 1070–2290 m. Vouchers: Jackson L 328, 318 (EA), Mathews PM 225 (EA), Dale IR 339 (EA). Native distribution range: Tropical Africa.

***Gymnosporia arbutifolia* Loes.** – Habit: Shrub or small tree. Habitat: Woodland and forest, 1750–3000 m. Vouchers: Irwin PH 525 (BR), Dale IR U12 (BR). Native distribution range: Eritrea to E Central Tropical Africa, SW Arabian Peninsula.

***Gymnosporia obscura* Loes.** – Habit: Shrub or small tree. Habitat: Riverine forest, forest margin, grassland, 2100–2550 m. Voucher: Lugard C 612 (EA). Native distribution range: Ethiopia to Burundi and N Tanzania.

***Gymnosporia senegalensis* Loes.** – Habit: Shrub or tree. Habitat: Wet savanna and woodland, 1750–2400 m. Vouchers: Harrington GN 509 (EA), Snowden JD 839 (EA), Dale IR 790(EA), Tnysnell CG 2370 (EA), Rono et al. SAJIT-PR 0011, SAJIT-PR 0188 (EA, HIB). Native distribution range: Tropical & S Africa, Arabian Peninsula.

***Maytenus undata* (Thunb.) Blakelock** – Habit: Shrub or small tree. Habitat: woodland, forest, riverine forest, 1750–3150 m. Vouchers: Bridson D 78 (BR), Rono et al. SAJIT-PR 0044 (EA, HIB). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Pristimera goetzei* (Loes.) R.H.Archer** – Habit: Liana. Habitat: Moist forest, riverine forest, 90–3000 m. Voucher: St Clair Thompson in Eggeling 393 (EA). Native distribution range: Ethiopia to N Malawi.

## F57. CLEOMACEAE

1 Genus, 2 species

***Cleome gynandra* L.** – Habit: Herb. Habitat: Disturbed grounds, cultivations, roadside, wet savanna, 1750–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World.

***Cleome monophylla* L.** – Habit: Herb. Habitat: Disturbed grassland/woodland, 20–2100 m. Voucher: Tweedie 668 (EA). Native distribution range: Tropical & S Africa, Arabian Peninsula, India, Sri Lanka.

## F58. COMBRETACEAE

2 Genera, 5 species

***Combretum collinum* Fresen.** – Habit: Tree. Habitat: Wet savanna, 1750–2250 m. Vouchers: Dale IR 3098 (EA), Major C & Lugard EJ 524 (EA), Templer JC 8 (EA). Native distribution range: NE Tropical Africa.

***Combretum collinum* subsp. *binderianum* (Kotschy) Okafa** – Habit: Tree. Habitat: Wooded grassland, 1100–2300 m. Voucher: Human observation sn (EA). Native distribution range: Tropical & S Africa.

***Combretum collinum* subsp. *elgonense* (Exell) Okafa** – Habit: Tree. Habitat: Wooded grassland, 1100–2300 m. Vouchers: Bally 2481 (EA), Major EJ; Lugard C 524 (K). Native distribution range: Ethiopia to Zambia.

***Combretum molle* R.Br. ex G.Don** – Habit: Tree. Habitat: Forest, woodland, 1750–2250 m. Vouchers: Brown ES 755 (EA), Snowden JD 837, 1063 (EA), Dale IR (3105), Major C & Lugard EJ 286 (EA). Native distribution range: Tropical & S Africa, Arabian Peninsula.

***Terminalia mollis* M.A.Lawson** – Habit: Tree. Habitat: Forest, woodland, 1750–2170 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

## F59. CONVOLVULACEAE

4 Genera, 14 species

***Astripomoea grantii* (Rendle) Verdc.** – Habit: Herb. Habitat: Forest, grassland, bushland, 1750–2250 m. Voucher: Chater-Jack 125 (EA). Native distribution range: E Central & E Tropical Africa.

***Astripomoea malvacea* var. *parviflora* (Rendle) Staples** – Habit: Sub-shrubby herb. Habitat: Forest, grassland, bushland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Convolvulus kilimandschari* Engl.** – Habit: Climber. Habitat: Upland forest, woodland, bamboo thickets, upland moor, 1800–3750 m. Vouchers: Hedberg 155 (EA), Tweedie EM 1786 (K), 1785 (K) 1585 (K), Wesche K 778 (EA), Tweedie 1585 (EA), Dummer RA 3585 (EA), Lienberg 1612 (EA), Rono et al. SAJIT-PR 0176 (EA, HIB). Native distribution range: Ethiopia to Tanzania.

***Cuscuta kilimanjari* Oliv.** – Habit: Climber. Habitat: Forest, 1500–1020 m. Vouchers: Tweedie EM 801 (K), Dawkins 783 (EA), Snowden JD 854 (EA). Native distribution range: Ethiopia to S Africa, Madagascar.

***Cuscuta planiflora* Ten.** – Habit: Twining herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie 2055 (K). Native distribution range: Macaronesia, Mediterranean to NW India, Eritrea to S Africa, Madagascar.

***Ipomoea biflora* Pers.** – Habit: Twinning Herb. Habitat: Forest, grassland, bushlands, 1750–2250 m. Vouchers: Kisalye N; van Heist M 284 (K). Native distribution range: Tropical & Subtropical Old World.

***Ipomoea cairica* (L.) Sweet** – Habit: Twiner. Habitat: Forest, woodland, grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, W Indian Ocean, Arabian Peninsula to Temperate E Asia

***Ipomoea fulvicaulis* Boiss. ex Hallier f.** – Habit: Herb. Habitat: Forest, outcrop rock, 1750–2250 m. Vouchers: Tweedie 583, 672 (EA). Native distribution range: Ethiopia to Botswana.

***Ipomoea hildebrandtii* Vatke** – Habit: Sub-woody shrublet. Habitat: Grassland, 150–2000 m. Vouchers: Human observation (1.351001 N 34.507378 E). Native distribution range: Ethiopia to Rwanda and Tanzania.

***Ipomoea kituiensis* Vatke** – Habit: Shrublet. Habitat: Forest, grassland, bushlands, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to S Tropical Africa.

***Ipomoea oenotherae* Hallier f.** – Habit: Erect or prostrate herb. Habitat: Seasonally moist grassland, outcrop rock, 990–2190 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa.

***Ipomoea polymorpha* Roem. & Schult.** – Habit: Erect or prostrate herb. Habitat: Grassland and moist bushland, 1750–1920 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Old World to Australia.

***Ipomoea tenuirostris* Choisy** – Habit: Twinning or prostrate herb. Habitat: Forest and woodland, 1650–2710 m. Vouchers: Irwin PH 146 (EA), Tweedie EM 350 (K). Native distribution range: Tropical Africa.

***Ipomoea wightii* Choisy** – Habit: Twinning or prostrate herb. Habitat: Upland grassland, montane forest edges, 1040–2400 m. Vouchers: Howard S, Irwin PH 150 (EA, MO), Tweedie EM 384 (K). Native distribution range: Ethiopia to S Africa, Madagascar, India to Bangladesh, Sri Lanka.

## F60. CORNACEAE

2 Genera, 2 species

***Alangium chinense* (Lour.) Harms** – Habit: Tree. Habitat: Upland forest, 750–2000 m. Vouchers: Katende T; Sheil D 697 (K), Snowden JD 1079 (EA). Native distribution range: Cameroon to SE Ethiopia and S Tropical Africa, Tropical & Subtropical Asia.

***Cornus volkensii* Harms** – Habit: Tree. Habitat: Forest, 2250–3150 m. Vouchers: Eggeling WJ 2458 (MO), Eggeling 1050 (EA), George Taylor 3468 (NHMK), Rono et al. SAJIT-PR 0228 (EA, HIB). Native distribution range: South Sudan to S Tropical Africa

## F61. CRASSULACEAE

4 Genera, 16 species

***Crassula alata* (Viv.) A.Berger** – Habit: Herb. Habitat: Forest, shallow soils, 1350–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: S & E Mediterranean to China (NW Yunnan).

***Crassula alata* subsp. *pharnaceoides* (Fisch. & C.A.Mey.) Wickens & M.Bywater** – Habit: Herb. Habitat: Wet grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Cameroon, Ethiopia to S Africa and Arabian Peninsula.

***Crassula alba* Forssk.** – Habit: Herb. Habitat: Forest, rocky grassland, 1500–4000 m. Voucher: Rono et al. SAJIT-PR 0094 (EA, HIB). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula.

***Crassula alsinoides* Engl.** – Habit: Sprawling or prostrate herb. Habitat: Montane forests, 1475–3600 m. Vouchers: Tweedie EM 1807B (K), Alan C Hamilton 6601 (MO), Rono et al. SAJIT-PR 0266 (EA, HIB). Native distribution range: Tropical & S Africa, SW Arabian Peninsula, Madagascar.

***Crassula granvikii* Mildbr.** – Habit: Herb. Habitat: Montane forests, 1650–4500 m. Vouchers: Lye 5721 (EA), Lugard EJ; Lugard C 422 (K), Beentje HJ 1993 (WAG), Rono et al. SAJIT-PR 0025 (EA, HIB), PK Rwaburindore 447 (MO). Native distribution range: Eritrea to N Malawi, to Yemen.

***Crassula rhodesica* (Merxm.) Wickens & M.Bywater** – Habit: Herb. Habitat: Forest clearings, rocky grassland, 1200–2378 m. Voucher: Human observation sn (EA). Native distribution range: Kenya to Namibia.

***Crassula schimperi* C.A.Mey.** – Habit: Herb. Habitat: Upper Forest edge, 3000–4100 m. Vouchers: Tweedie 2767, Wood GH (K), Tweedie EM 21 (MO), Rono et al. SAJIT-PR 0092 (EA, HIB). Native distribution range: Tropical & S Africa to Himalaya.

***Crassula schimperi* subsp. *phyturus* (Mildbr.) R.Fern.** – Habit: Herb. Habitat: Forest on moist rocks in crevices, 1050–2400 m. Vouchers: Hedberg 4492 (EA), Tweedie 2767 (EA), Kisalye N et al. 04 (K), Rono et al. SAJIT-PR 0138 (EA, HIB). Native distribution range: NE & E Tropical Africa, and Yemen.

***Kalanchoe crenata* (Andrews) Haw.** – Habit: Herb. Habitat: Forest, bushland, grassland, moist rocks, 1650–2300 m. Vouchers: Snowden JD 1032 (EA), Tengecho B 383 (EA), Jack C 164 (EA). Native distribution range: Tropical & S Africa, Arabian Peninsula.

***Kalanchoe densiflora* Rolfe** – Habit: Herb. Habitat: Disturbed places, woodland, forest, upper foerest edge, 1750–3150 m. Vouchers: Bamps PRJ 6495 (EA), (BR), Symes YE 246 (EA), Jack C 398 (EA), Rono et al. SAJIT-PR 0221 (EA, HIB). Native distribution range: Ethiopia to E DR Congo and Tanzania.

[EX]***Kalanchoe integra* Kuntze** – Habit: Herb. Habitat: Forest, grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & Subtropical Asia.

***Kalanchoe lanceolata* Pers.** – Habit: Herb. Habitat: Open woodland, wooded grassland, 950–2100 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, SW Madagascar, SW Arabian Peninsula, Indian Subcontinent.

***Kalanchoe prittwitzii* Engl.** – Habit: Herb. Habitat: Forest, outcrop rock, 1800–2400 m. Vouchers: Jack C 396 (EA), Snowden JD 943 (EA), Symes YE 245 (EA), Lugard C & Lugard EJ 115 (EA). Native distribution range: E Ethiopia to E Central & E Tropical Africa.

***Sedum meyeri-johannis* Engl.** – Habit: Herb. Habitat: Upland forest, heathland, 3200–4300 m. Vouchers: Thomas AS 2703 (EA), Dale U 848 (EA). Native distribution range: E Central & E Tropical Africa.

***Sedum ruwenzoriense* Baker f.** – Habit: Succulent herb. Habitat: Upland heath and upland moor, in rock crevices in heath zone, 2400–4300 m. Vouchers: Wood GH 124 (EA), Mwangangi OM 3871, Mwangangi OM 318 (WAG, MO), Rono et al. SAJIT-PR 0132 (EA, HIB). Native distribution range: Ethiopia to Rwanda.

***Umbilicus botryoides* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Rock crevices montane forest, 2250–3900 m. Vouchers: Rose 10216 (EA), Wesche K 588 (EA). Native distribution range: Cameroon, Eritrea to Tanzania.

## F62. CUCURBITACEAE

9 Genera, 13 species

***Coccinia adoensis* (Hochst. ex A.Rich.) Cogn.** – Habit: Climber herb. Habitat: Grassland, moist forest, woodland, 1600–2300 m. Vouchers: Bally 251 (EA), Polhill 400 (S), Norman EM 225 (K), Taylor G 3787 (S). Native distribution range: Ghana to Eritrea and S Africa.

***Cucumis ficifolius* A.Rich.** – Habit: Herb. Habitat: Upland grassland roadsides, 1200–2800 m. Voucher: Snowden JD 1061 (EA). Native distribution range: Mauritania to Ethiopia and Tanzania, SW Arabian Peninsula.

***Cucumis maderaspatanus* L.** – Habit: climber or trailer Herb. Habitat: Riverine margins, woodland, bushland, upland forest, 0–1800 m. Vouchers: Tweedie EM 2247 (K, BR). Native distribution range: Tropical & Subtropical Old World.

***Lagenaria abyssinica* (Hook.f.) C.Jeffrey** – Habit: Climber herb. Habitat: Bushland, montane forest, 900–3000 m. Vouchers: Mwangangi OM 450 (BR), Rono et al. SAJIT-PR 0169 (EA, HIB). Native distribution range: Ethiopia to DR Congo and Tanzania.

***Momordica cissoides* Planch. ex Benth.** – Habit: Climber herb. Habitat: Riverine and rainforest, 1190–1830 m. Voucher: Snowden JD 1040 (EA). Native distribution range: Tropical Africa.

***Momordica foetida* Schumach.** – Habit: Climber herb. Habitat: Forest edges, old cultivations, disturbed regions, 1200–3000 m. Vouchers: Tweedie 1097 (K), Cheseny CM 40 (BR), Lind EM 114 (BR), Rono et al. SAJIT-PR 0075, SAJIT-PR 0173 (EA, HIB). Native distribution range: Tropical & S Africa.

***Momordica friesiorum* (Harms) C.Jeffrey** – Habit: Climber herb. Habitat: Upland Forest edges, wet bushlands, 1700–2850 m. Voucher: Tweedie EM 915 (K). Native distribution range: Ethiopia to N Malawi.

***Oreosyce africana* Hook.f.** – Habit: climber or trailer Herb. Habitat: Bamboo Forest, swamps, grassland edges, 1500–3000 m. Voucher: Tweedie 1190 (EA). Native distribution range: Bioko to Ethiopia and South Africa, Madagascar.

***Peponium elgonense* N.Wei, G.W.Hu & Q.F.Wang** – Habit: Vine. Habitat: Open grassland, moist rock wall of a steep cliff, 2565 m. Vouchers: Rono et al. SAJIT-PR 0121, SAJIT-PR 0152 (EA, HIB). Native distribution range: Kenya.

EX***Sicyos polyacanthos* Cogn.** – Habit: climber or trailer Herb. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie DR 4133 (WAG). Native distribution range: Bolivia to Brazil and N Argentina.

***Trochomeria macrocarpa* Harv.** – Habit: Trailing or climbing herb. Habitat: Tree grassland, woodland, 1000–2550 m. Vouchers: Lugard E 143 (K), Tweedie EM 1101 (K), Polhill 414 (BR). Native distribution range: Tropical & S Africa.

***Zehneria minutiflora* (Cogn.) C.Jeffrey** – Habit: Prostrate herb. Habitat: Upland moist forest edges, bamboo thickets, grassland, 1100–3350 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Zehneria scabra* Sond.** – Habit: climber or trailer Herb. Habitat: Forest edges, old cultivated bushlands, wet savanna, riverine forest, grass thickets, 1000–3350 m. Vouchers: Tweedie EM 1384 (BR), Tweedie DR 4073 (WAG), Tweedie EM 1384 (K), Rono et al. SAJIT-PR 0030, SAJIT-PR 0079 (EA, HIB). Native distribution range: Tropical & Subtropical Old World.

## F63. EBENACEAE

2 Genera, 3 species

***Diospyros abyssinica* (Hiern) F.White** – Habit: Shrub. Habitat: Montane Forest, open bushland woodland, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

***Euclea divinorum* Hiern** – Habit: Shrub or small tree. Habitat: Grassland, open bushland, montane forest, 1750–2700 m. Vouchers: Jackson THE 329a (MO), Taiti S 612 (BR), Rono et al. SAJIT-PR 0002 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Euclea racemosa* subsp. *schimperi* (A.DC.) F.White** – Habit: Shrub or small tree. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Egypt to S Africa, S Arabian Peninsula, Comoros.

## F64. ERICACEAE

2 Genera, 7 species

***Agarista salicifolia* G.Don** – Habit: Shrub or tree. Habitat: Woodland, moist forest, heath zones, 1750–3150 m. Vouchers: Dummer RA 3619 (US), St Clair-Thompson GW 2/40 (BR), Wesche K 944 (EA), Rono et al. SAJIT-PR 0129 (EA, HIB). Native distribution range: Tropical Africa, W Indian Ocean

***Erica arborea* L.** – Habit: Shrub or tree. Habitat: Heath, woodland, alpine, 1800–3900 m. Vouchers: Tweedie DR 2066 (EA), Wesche K 98 (EA), Kokwaro JO 2547 (EA), Taylor G de C 3448 (EA), Watere 10513 (EA), Gardner HM 2253 (EA), Leyard WC 2964 (EA), Tothill BH 2293 (EA), Rono et al. SAJIT-PR 0151 (EA, HIB). Native distribution range: Mediterranean to W Transcaucasus, Tropical African Mountains, Arabian Peninsula.

***Erica filago* (Alm & T.C.E.Fr.) Beentje** – Habit: Shrub. Habitat: Disturbed or burnt areas in alpine, heath, moorland zone, 2000–4321 m. Vouchers: Wesche K 124, 854 (EA), Major ES; Lugard C 483 (K), Adamson J 485 (K), Hedberg O 874 (K), Dale IR 3096 (K), Dale IR 3184 (K), Dummer RA 3355 (US), Thomas AS 606 (BR). Native distribution range: Kenya to N Malawi.

***Erica mannii* (Hook.f.) Beentje** – Habit: Shrub or tree. Habitat: Upper forest edge, moorland, 3150–4050 m. Vouchers: Tweedie 1154 (BR, K), Hedberg O 850 (K), Synge PM S986 (BR) Native distribution range: Nigeria to Cameroon, Bioko, Uganda to S Tropical Africa.

***Erica silvatica* (Engl.) Beentje** – Habit: Shrub. Habitat: Short grasslands, moorland, heath zones, bamboo clearing, forest edges, 1650–4321 m. Vouchers: Wesche K 1814 (EA), Dummer RA 3503 (K), 3509 (US), Hedberg KO 4555 (BR), 4535 (EA). Native distribution range: Tropical African Mountains.

***Erica trimera* (Engl.) Beentje** – Habit: Shrub or small tree. Habitat: Moorland, rain forest, 3150–4321 m. Voucher: Taylor G 3524 (BR). Native distribution range: E Central Tropical Africa (Ruwenzori Mountains).

*****Erica trimera* subsp. *elgonensis* (Mildbr.) Beentje** – Habit: Shrub or small tree. Habitat: Moorland, 3450–3800 m. Vouchers: Saundy & Hancock 63 (EA), Hedberg 4529 (EA), Lye & Pocs 23079 (EA), Lindblom GSN (BR), Wesche K 1014 (EA). Native distribution range: E Tropical Africa (Mt Elgon).

## F65. EUPHORBIACEAE

8 Genera, 29 species

***Acalypha polymorpha* Müll.Arg.** – Habit: Herb. Habitat: Disturbed or burnt grassland, open woodland, 1700–2300 m. Voucher: James (EA). Native distribution range: Central & E Tropical Africa.

***Acalypha psilostachya* Hochst. ex A.Rich.** – Habit: Herb or subshrub. Habitat: Moist rain forest, grassland, rocky woodland, 520–3050 m. Vouchers: Dawkins HC 779 (EA, BR). Native distribution range: Cameroon to Ethiopia and S Tropical Africa.

***Acalypha volkensii* Pax** – Habit: Herb or subshrub. Habitat: Upland grassland, forest undergrowth, bushland, 800–2700 m. Voucher: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Burundi.

***Clutia abyssinica* Jaub. & Spach** – Habit: Shrub or small tree. Habitat: Upland forest and edges, bushlands, wooded grassland, riverine thickets, 1500–3150 m. Vouchers: Beentje HJ 2062 (WAG), Mwangangi OM 335 (BR), Cheseny CM 15 (RSA), Katende AB 3604 (MO), Rono et al. SAJIT-PR 0208, SAJIT-PR 0074 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Clutia abyssinica* var. *pedicellaris* (Pax) Pax** – Habit: Herb, shrub or small tree. Habitat: Forest, woodland, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to Malawi.

***Clutia kilimandscharica* Engl.** – Habit: Shrub. Habitat: Forest, upper forest edge, moorland, 2250–3600 m. Vouchers: Thomas AS 656 (EA), Tothill BH 2303 (EA), Eggeling 2461 (EA). Native distribution range: Somalia to Zimbabwe.

***Clutia lanceolata* subsp. *robusta* (Pax) M.G.Gilbert** – Habit: Shrub. Habitat: Forest, upper forest edge, moorland, 2400–3350 m. Vouchers: Kokwaro JO 2439 (BR), Taylor PG 3621 (BR). Native distribution range: NE Tropical Africa, Arabian Peninsula.

***Croton macrostachyus* Hochst. ex Delile** – Habit: Shrub or tree. Habitat: Woodland, 1750–2400 m. Vouchers: Snowden JD 869, 870 (A, EA, BR), Rono et al. SAJIT-PR 0076 (EA, HIB). Native distribution range: Tropical Africa.

***Euphorbia brevicornu* Pax** – Habit: Herb. Habitat: Moist open forest, 2200–3600 m. Vouchers: Gillett 18429 (EA, BR), Lugard EJ; Lugard C 380 (K), Rono et al. SAJIT-PR 0220 (EA, HIB). Native distribution range: Kenya, Uganda.

***Euphorbia brunellii* Chiov.** – Habit: hairless from a fleshy tuber with apex at soil level. Habitat: Grassland, 1100–2500 m. Vouchers: Tweedie 355 (EA). Native distribution range: Ethiopia to Uganda.

***Euphorbia crotonoides* Boiss.** – Habit: Herb. Habitat: Disturbed grounds, outcrop rock, open woodland, forest edge, 800–2400 m. Voucher: Rono et al. SAJIT-PR 0077 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Euphorbia depauperata* Hochst. ex A.Rich.** – Habit: Shrub or herb. Habitat: Grassland, 1900–3200 m. Voucher: Tweedie DR 2521 (WAG). Native distribution range: Tropical Africa.

***Euphorbia engleri* Pax** – Habit: Herb. Habitat: Montane rain forest, 1500–2800 m. Vouchers: Mwangangi OM & Kanuri F. 342 (BR), Tweedie 494 (K), Dale IR U849 (K), Hedberg O 93 (K), Wesche K 1313 (K). Native distribution range: E Tropical Africa.

***Euphorbia heterospina* S.Carter** – Habit: Shrub. Habitat: Woodland, rock slopes, 550–1600 m. Voucher: Snowden JD 1046 (EA). Native distribution range: Kenya, Uganda.

[EX]***Euphorbia hirta* L.** – Habit: Herb. Habitat: Roadsides, cultivation, forest, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & Subtropical America.

***Euphorbia inaequilatera* Sond.** – Habit: Herb. Habitat: Forest, wooded grassland, 1750–2500 m. Voucher: Hedberg 41 (EA). Native distribution range: Africa to Pakistan.

[EX]***Euphorbia murielii* N.E.Br.** – Habit: Tree. Habitat: Forest, rocky slopes, open wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Sudan.

[EX]***Euphorbia prostrata* Aiton** – Habit: Herb. Habitat: Disturbed lawns, grasslands, roadside, 1750–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew

ADQ (2013) (REF). Native distribution range: Central & S USA to Tropical & Subtropical America.

[EX]***Euphorbia rubella*** **Pax** – Habit: Tuber. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia.

***Euphorbia schimperiana*** **Scheele** – Habit: Herb. Habitat: Grassland, montane forest edge, roadside, 1600–3760 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa, Arabian Peninsula.

***Euphorbia systyloides*** **Pax** – Habit: Herb. Habitat: wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Uganda to S Tropical Africa.

***Euphorbia ugandensis*** **Pax & K.Hoffm.** – Habit: Woody herb or Shrub. Habitat: Bamboo zone, forest clearing, 1980–3350 m. Vouchers: Tothill BH 2275 (EA), Tweedie EM 2521 (K). Native distribution range: SW Uganda to N Malawi.

***Euphorbia wellbyi*** **N.E.Br.** – Habit: Herb. Habitat: Upper montane forest edge, moorland, 2300–4000 m. Vouchers: Snowden JD 462 (EA), VC Hedberg E 3 (EA), Hedberg 214 (EA). Native distribution range: Ethiopia to Tanzania.

***Euphorbia wellbyi*** **var.** ***glabra*** **S.Carter** – Habit: Herb. Habitat: Heathland, forest edge, 3200–4080 m. Vouchers: Hedberg O 4550 (K), Lisowski S 12913 (BR), Snowden JD 462 (EA), Liebenberg 1625 (EA), Wood G 150 (EA). Native distribution range: South Sudan to Tanzania.

***Macaranga capensis*** **(Baill.) Sim** – Habit: Tree. Habitat: Evergreen Forest, 10–3050 m. Vouchers: Snowden JD 815 (EA). Native distribution range: Gabon to Kenya and S Africa.

***Macaranga kilimandscharica*** **Pax** – Habit: Tree. Habitat: Forest, 2250–3000 m. Voucher: Snowden JD 906 (BR). Native distribution range: Ethiopia to S Tropical Africa.

***Neoboutonia macrocalyx*** **Pax** – Habit: Tree. Habitat: Forest, 2250–3000 m. Vouchers: Styles B 306 (BR), Synge PM S789 (BR). Native distribution range: Cameroon to Uganda and S Tropical Africa.

[EX]***Ricinus communis*** **L.** – Habit: Herb or subshrub. Habitat: Woodland edges, 900–2000 m. Vouchers: Padwa JH 40 (EA), Jack C 184 (EA). Native distribution range: NE Tropical Africa.

***Tragia brevipes*** **Pax** – Habit: Herb or shrub. Habitat: Forest, woodland, wooded grassland, 600–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Somalia and Zimbabwe.

## F66. FABACEAE

48 Genera, 168 species

***Adenocarpus mannii*** **Hook.f.** – Habit: Shrub. Habitat: Montane forest, grassland, rock outcrop on moorland, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical African Mountains to Namibia.

***Aeschynomene abyssinica* Vatke** – Habit: Shrub or herb. Habitat: Grassland, scattered grassland, stream sides, swamp edges, bamboo edges, 1000–3000 m. Vouchers: Hedberg O 54 (UPS), Tweedie 1890 (EA), Rono et al. SAJIT-PR 0053 (EA, HIB). Native distribution range: Tropical Africa.

***Aeschynomene schimperi* Hochst. ex A.Rich.** – Habit: Shrubby herb or shrub. Habitat: Grassland, marshes, riverside, 670–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Afroamphica africana* (Hook.f.) H.Ohashi & K.Ohashi** – Habit: Climber herb. Habitat: Montane Forest edge, woodland, 1750–3000 m. Voucher: Mwangangi OM 485 (BR). Native distribution range: Nigeria to Ethiopia and Malawi.

***Albizia amara* subsp. *sericocephala* Brenan** – Habit: Tree. Habitat: Woodland, wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to S Africa.

***Albizia grandibracteata* Taub.** – Habit: Tree. Habitat: Forest, riverine forest, grassland, 1750–2250 m. Voucher: Bally 2498 (EA). Native distribution range: Ethiopia to N Tanzania.

***Albizia gummifera* C.A.Sm.** – Habit: Tree. Habitat: Forest, riverine forest, forest clearing, 1750–2440 m. Vouchers: Lugard 511 (EA), Mrs C Jack 434 (BR). Native distribution range: Tropical Africa, Central Madagascar.

***Alysicarpus glumaceus* (Vahl) DC.** – Habit: Herb. Habitat: Flooded grassland, woodland, 1000–2400 m. Voucher: Tweedie EM 907 (K). Native distribution range: Tropical & S Africa, Arabian Peninsula.

***Alysicarpus rugosus* subsp. *perennirufus* J.Léonard** – Habit: Herb. Habitat: Flooded grassland, 940–2500 m. Voucher: Tweedie 907 (EA). Native distribution range: Central African Republic to Eritrea and S Africa.

***Angylocalyx braunii* Harms** – Habit: Tree. Habitat: Understory of montane forest, riparian forest, 800 m. Voucher: Lugard C & Lugard EJ 334 (EA). Native distribution range: E Tropical Africa. (Kenya, Tanzania)

***Antopetitia abyssinica* A.Rich.** – Habit: Herb. Habitat: Grassland, moorland, open bush land, 1700–3500 m. Voucher: Rono et al. SAJIT-PR 0270 (EA, HIB). Native distribution range: Tropical Africa.

***Argyrolobium fischeri* Taub.** – Habit: Herb or subshrub. Habitat: Forest, bushland, grassland, 1700–2700 m. Voucher: Gerh Lindblom sn (S). Native distribution range: South Sudan to S Tropical Africa.

***Argyrolobium rupestre* subsp. *kilimandscharicum* (Taub.) Polhill** – Habit: Herb. Habitat: Grassland, forest 2250–3300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: South Sudan to E Tropical Africa

***Astragalus atropilosulus* subsp. *burkeanus* (Benth. ex Harv.) J.B.Gillett** – Habit: Herb. Habitat: Grassland, open bushland, forest margin, moorland, 3900 m. Voucher: Lugard 334 (EA). Native distribution range: Ethiopia to S Africa, SW Arabian Peninsula.

[EX]***Biancaea decapetala* (Roth) O.Deg.** – Habit: Shrub. Habitat: Rainforest, tree grassland, bushlands, 1750–2400 m. Voucher: Lugard 298 (EA). Native distribution range: India to S Central Japan.

***Calpurnia aurea* (Aiton) Benth.** – Habit: Shrub or tree. Habitat: Montane Forest, 1300–2250 m. Voucher: Tweedie 1584 (EA). Native distribution range: Central African Republic to Eritrea and S Africa.

***Chamaecrista falcinella* (Oliver) Lock** – Habit: Herb. Habitat: Wooded or bushy grassland, 1390–2650 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: E Central & E Tropical Africa.

***Chamaecrista falcinella* var. *parviflora* (Steyaert) Lock** – Habit: Herb. Habitat: Grassland, forest, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya to Namibia.

***Chamaecrista kirkii* Standl.** – Habit: Herb. Habitat: Seasonally flooding grassland, 1600–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Chamaecrista mimosoides* (L.) Greene** – Habit: Herb or shrub. Habitat: Forest clearing, forest edge, grassland wooded grassland, 1750–2400 m. Voucher: Tweedie 4095 (K). Native distribution range: Tropical & S Africa, Tropical Asia to N Australia.

***Chamaecrista stricta* E.Mey.** – Habit: Herb. Habitat: Disturbed and pusture grounds, 1750–2250 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to S Africa, N & Central Madagascar.

***Chamaecrista usambarensis* Standl.** – Habit: Herb. Habitat: Upland forest, grassland, near rocks and on roadsides, 1800–2590 m. Voucher: Mwangangi OM 481 (BR). Native distribution range: E Tropical Africa.

***Chamaecrista wittei* (Ghesq.) Lock** – Habit: Herb. Habitat: Upland grassland, bushland, 1740–2590 m. Voucher: Humphreys 1123 (EA). Native distribution range: Cameroon to Eritrea and Mozambique.

***Colutea abyssinica* Kunth & C.D.Bouché** – Habit: Shrub. Habitat: Montane grassland, forest margin, bushlands, 2000–2800 m. Vouchers: Tweedie 859 (K), Rono et al. SAJIT-PR 0241 (EA, HIB). Native distribution range: Rwanda to NE & E Tropical Africa.

***Craibia brownii* Dunn** – Habit: Tree. Habitat: Forest, riverine, 1100–2200 m. Vouchers: Dale IR 3241 (BR), Jackson THE 377 (BR), Dale IR MA-261214-1 (MA). Native distribution range: South Sudan to Zambia.

***Crotalaria agatiflora* Schweinf. ex Engl.** – Habit: Shrub. Habitat: Forest, woodland, shrubland, 1170–2100 m. Vouchers: Taylor G 3857 (MO), Rono et al. SAJIT-PR 0083 (EA, HIB). Native distribution range: Ethiopia to S Tropical Africa.

****Crotalaria agatiflora* subsp. *engleri* (Harms ex Baker f.) Polhill** – Habit: Shrub or small tree. Habitat: Forest, wet savanna, 2300–3500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Central Kenya to N Tanzania.

***Crotalaria agatiflora* subsp. *imperialis* (Taub.) Polhill** – Habit: Woody herb or shrub. Habitat: Grassland, bushlands, 2000–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to E DR Congo.

***Crotalaria anthyllopsis* Welw. ex Baker** – Habit: Herb. Habitat: Forest, rocky or wooded grasslands, 1200–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa to South Africa.

***Crotalaria brevidens* Benth.** – Habit: Herb. Habitat: Woodland, grassland, bushland, 1500–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria to NE & E Tropical Africa.

***Crotalaria cephalotes* Steud. ex A.Rich.** – Habit: Herb. Habitat: Open grassland, woodland, 1750–2250 m. Voucher: Symes YE 232 (MO). Native distribution range: Tropical Africa.

***Crotalaria chrysochlora* Baker f. ex Harms** – Habit: Herb. Habitat: Grassland, rocky disturbed places, 1700–2900 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Kenya and S Tropical Africa.

***Crotalaria cleomifolia* Welw. ex Baker** – Habit: Herb or shrub. Habitat: Forest, grassland, bushland, 1150–2600 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa, Madagascar.

***Crotalaria cylindrica* A.Rich.** – Habit: Herb. Habitat: Montane grassland, moorland, 2000–3550 m. Vouchers: Tweedie 1418, 2088 (K). Native distribution range: Eritrea to Kenya.

***Crotalaria deserticola* Taub. ex Baker f.** – Habit: Herb. Habitat: Woodland, grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to S Tropical Africa.

***Crotalaria dewildemaniana* R.Wilczek** – Habit: Herb. Habitat: Grassland, woodland, 1750–2400 m. Vouchers: Irwin PH 116 (EA, K), Tweedie EM 922 (MO). Native distribution range: Cameroon to E Tropical Africa.

***Crotalaria glauca* Willd.** – Habit: Herb. Habitat: Grassland, 1150–2300 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Crotalaria hyssopifolia* Klotzsch** – Habit: Herb. Habitat: Woodland, roadside, outcrop rock, 1750–2400 m. Vouchers: Tweedie 188. Native distribution range: Tropical Africa.

***Crotalaria incana* subsp. *purpurascens* (Lam.) Milne-Redh.** – Habit: Herb. Habitat: Grassland, bushland, 1250–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa, Madagascar, Arabian Peninsula, SW India.

***Crotalaria lebrunii* Baker f.** – Habit: Shrub. Habitat: Streamside, clearings and forest edge, 2200–2750 m. Voucher: Rono et al. SAJIT-PR 0177 (EA, HIB). Native distribution range: Eastern DR Congo to Central Kenya.

***Crotalaria karagwensis* Taub.** – Habit: herb. Habitat: Open and wooded grasslands, bushlands, forest 1600–2300 m. Vouchers: Lugard EJ 197 (K), Lugard EJ; Lugard C 530 (K). Native distribution range: Cameroon to Ethiopia and Tanzania.

***Crotalaria keniensis* Baker f.** – Habit: Herb or shrub. Habitat: Streamside, forest edges, bushland, 1700–3200 m. Vouchers: Thomas AS 463 (MO), Mwangangi OM 465 (MO). Native distribution range: SW Ethiopia to Tanzania.

***Crotalaria laburnifolia* L.** – Habit: Herb or shrub. Habitat: Forest, grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Tropical Asia, N Australia.

***Crotalaria lachnocarpoides* Engl.** – Habit: Bushy herb or small shrub. Habitat: Montane grassland, bushland, 1300–3000 m. Vouchers: Snowden JD 956 (MO), Rono et al. SAJIT-PR 0080 (EA, HIB). Native distribution range: Ethiopia to S Tropical Africa.

***Crotalaria lachnophora* A.Rich.** – Habit: Herb or shrub. Habitat: Wooded grasslands, roadside, 1500–2200 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Crotalaria natalitia* Meisn.** – Habit: Herb or small shrub. Habitat: Forest edges, bushland, and wooded open grassland, 1600–3000 m. Vouchers: Tweedie EM 1355 (MO), Snowden JD 932 (MO). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

***Crotalaria petitiana* (A.Rich.) Walp.** – Habit: Herb. Habitat: Grassland, bushland, 700–2200 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: NE Tropical Africa to N Tanzania.

***Crotalaria quartiniana* A.Rich.** – Habit: Herb. Habitat: Rare in forest edges, 2340–2650 m. Vouchers: Tweedie EM 1711 (K), Irwin PH 133A (BR). Native distribution range: Tropical Africa, Arabian Peninsula.

***Crotalaria recta* Steud. ex A.Rich.** – Habit: Herb or shrub. Habitat: Grassland, swamp margins, cultivated grounds, woodland, 850–2600 m. Vouchers: Tweedie EM 1317 (MO), Snowden JD 931 (MO). Native distribution range: Tropical & S Africa.

***Crotalaria spinosa* Hochst.** – Habit: Herb or shrub. Habitat: Wet savanna, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa, Arabian Peninsula.

***Crotalaria vallicola* Baker f.** – Habit: Herb. Habitat: Grassland, bushland, 1300–2500 m. Voucher: Irwin PH 118 (MO). Native distribution range: Sudan to Tanzania.

***Crotalaria vatkeana* Engl.** – Habit: Herb. Habitat: Forest, grassland, and bushland, 2000–3300 m. Voucher: Tweedie EM 535 (MO). Native distribution range: Ethiopia to N Tanzania.

***Dalbergia lactea* Vatke** – Habit: Small tree or shrub. Habitat: Forest margin, riverine forest, bushland, grassland, 1750–2250 m. Voucher: Snowden JD 492 (NHMUK). Native distribution range: Tropical Africa.

***Dolichos compressus* R.Wilczek** – Habit: herb. Habitat: Wooded grasslands, bushlands, 1000–2000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: S Sudan to Kenya.

***Dolichos sericeus* subsp. *formosus* (Hochst. ex A.Rich.) Verdc.** – Habit: Climbing herb. Habitat: Grassland, 1750–2400 m. Vouchers: Tweedie 1930 (EA), Tothill BH 2699 (EA), Tweedie EM 241 (K). Native distribution range: Eritrea to E Tropical Africa, Angola.

***Dolichos sericeus* subsp. *pseudofalcatus* Verdc.** – Habit: Climbing or prostrate herb. Habitat: Montane Forest edges, clearings, woodland, grassland, 1150–2780 m. Voucher: Lugard 89 (EA). Native distribution range: E Tropical Africa to DR Congo.

***Dumasia villosa* DC.** – Habit: Climber herb or shrub. Habitat: Wet forest edge, woodland, 1800–2550 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World.

***Entada abyssinica* Steud.** – Habit: Tree. Habitat: Woodland, wooded grassland, 1750–2290 m. Vouchers: Lugard 600 (EA), Hedberg O 1066 (UPS), Tweedie DR 1444 (BR). Native distribution range: Tropical Africa, Madagascar.

***Eriosema cordifolium* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Grassland, 1750–2290 m. Vouchers: Tweedie EM 198 (K). Native distribution range: Nigeria to Kenya and Angola.

***Eriosema jurionianum* Staner & De Craene** – Habit: Herb. Habitat: Forest edges, wet savanna, 1750–2800 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Tanzania.

***Eriosema macrostipulum* Baker f.** – Habit: Herb. Habitat: Woodland, grassland, around 2100 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Eriosema montanum* Baker f.** – Habit: Shrubby herb. Habitat: Wooded grassland, 1500–3300 m. Voucher: Gerh Lindblom (S). Native distribution range: Tropical Africa.

***Eriosema nutans* Schinz** – Habit: Herb. Habitat: Wooded grassland, wet savanna, forest edges, 1200–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria, Eritrea to S Africa.

***Eriosema scioanum* subsp. *lejeunei* (Staner & De Craene) Verdc.** – Habit: Herb. Habitat: Montane forest clearings, upland grassland, 2100–2500 m. Voucher: Tweedie EM 913 (K, EA). Native distribution range: Nigeria to E Tropical Africa.

***Eriosema sparsiflorum* Baker f.** – Habit: Herb. Habitat: Grassland, 1860–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: W Tropical Africa to Kenya and Angola.

***Erythrina abyssinica* Lam.** – Habit: Shrub or tree. Habitat: Wooded grassland, 1750–2250 m. Voucher: Rono et al. SAJIT-PR 0096 (EA, HIB). Native distribution range: Eritrea to Botswana.

***Flemingia grahamiana* Wight & Arn.** – Habit: bushy herb, shrub or small tree. Habitat: Wooded grassland, 1170–2100 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa to Arabian Peninsula, S India, S China (Yunnan) to Indo-China.

****Galega lindblomii* (Harms) J.B.Gillett** – Habit: Herb. Habitat: Grasslands, forest margins and bamboo area, 2000–3000 m. Vouchers: Bogdan A 4143 (K), Snowden 443 (EA), Gillett JB 18404 (US, WAG), BH Tothill 2375 (EA), Lugard 14 (EA), Beentje HJ 1938 (WAG), Lavranos JJ; Newton I 17768 A (WAG). Native distribution range: E Tropical Africa (Mt Elgon, Cherangani Hills).

***Hylodesmum repandum* (Vahl) H.Ohashi & R.R.Mill** – Habit: Herb or shrub. Habitat: Forest, streamsides, roadsides, 1450–3000 m. Vouchers: Stein W Bie (UPS), Rono et al. SAJIT-PR 0064 (EA, HIB). Native distribution range: Africa, Arabian Peninsula, China (S Yunnan) to Tropical Asia.

***Indigofera ambelacensis* Schweinf.** – Habit: Herb. Habitat: Grassland, bushland, rocky grounds roadsides, 1000–2200 m. Voucher: Tweedie 1735 (EA). Native distribution range: Congo to Eritrea and Tanzania.

***Indigofera arrecta* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Bushland, grassland and forest edge, 300–2700 m. Voucher: Rwaburindore PK 465 (WAG). Native distribution range: Tropical & S Africa, Arabian Peninsula.

***Indigofera atriceps* Hook.f.** – Habit: Herb. Habitat: Grassland, montane forest, 1000–3010 m. Vouchers: Tweedie 862 (EA), Mwangangi OM 446 (BR), Wood GHS 427 (EA). Native distribution range: Tropical Africa.

***Indigofera bogdanii* J.B.Gillett** – Habit: Shrub. Habitat: Grassland, roadside, rock outcrop, 1750–2750 m. Vouchers: Beentje HJ 1938 (EA), Tweedie MR 46 (EA), Bogdan A 4143 (EA). Native distribution range: Ethiopia to Tanzania.

***Indigofera brevicalyx* Baker f.** – Habit: Herb. Habitat: Grassland, woodland, 1200–2500 m. Vouchers: Tweedie 861, Tweedie EM 765 (K). Native distribution range: Eritrea to E Central & E Tropical Africa, SW Arabian Peninsula.

***Indigofera circinella* Baker f.** – Habit: Herb. Habitat: Shallow soil grassland, roadside, Wooded grassland, 1100–2200 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Kenya to Zimbabwe.

***Indigofera conjugata* Baker** – Habit: Herb. Habitat: Grassland, wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

[EX]***Indigofera emarginella* Steud. ex A.Rich.** – Habit: Shrub. Habitat: Grassland, 900–2300 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Eritrea and S Tropical Africa.

[EX]***Indigofera homblei* Baker f. & Martin** – Habit: Shrub. Habitat: Montane grassland, 1600–3100 m. Voucher: Rono et al. SAJIT-PR 0097 (EA, HIB). Native distribution range: Cameroon to Tanzania and Eswatini.

***Indigofera longistaminata* Schrire** – Habit: Shrub. Habitat: Montane grassland, thickets, 1750–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Kenya and Malawi.

***Indigofera mimosoides* Baker** – Habit: Herb or shrub. Habitat: Grassland, bushland, montane forest margin, 1150–2300 m. Voucher: Tweedie 874 (EA). Native distribution range: Cameroon to Ethiopia and S Africa.

***Indigofera schimperi* var. *schimperi* Jaub.** – Habit: Herb. Habitat: Montane forest, 1000–3010 m. Voucher: Wood GHS 432 (EA). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula.

[EX]***Indigofera schlechteri* Baker f.** – Habit: Woody herb or shrub. Habitat: Grassland, roadside, bamboo zone, forest margin, 1500–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: S Africa.

***Indigofera spicata* Forssk.** – Habit: Herb. Habitat: Disturbed grassland and woodland, 0–2900 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Africa, Arabian Peninsula.

***Indigofera subargentea* De Wild.** – Habit: Herb. Habitat: Montane grassland, 1800–2000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Ethiopia and Zambia.

***Indigofera subulata* var. *scabra* (Roth) Meikle** – Habit: Herb or shrub. Habitat: Grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropics & Subtropics.

***Indigofera trita* L.f.** – Habit: Herb or shrub. Habitat: Grassland, bushland, forest margin, 1700–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World.

***Indigofera vohemarensis* Baill.** – Habit: Herb or shrub. Habitat: Grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to N Mozambique, Comoros, Madagascar.

***Lablab purpureus* (L.) Sweet** – Habit: Climbing herb. Habitat: Riverine forest edge, 0001–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cape Verde, Tropical & S Africa, Madagascar, India.

***Lathyrus hygrophilus* Taub.** – Habit: Straggling or climbing herb. Habitat: Swampy grassland, bamboo edges, 1800–4100 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to Malawi.

***Lathyrus sphaericus* Retz.** – Habit: herb. Habitat: Open scrubs, upland forest grassland, 1950–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: E Central Europe to Mediterranean and Afghanistan, Tropical African Mountains.

***Lotus becquetii* Boutique** – Habit: Herb. Habitat: Grassland, rocky hillside, 2000–2870 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: South Sudan to Burundi.

***Lotus goetzei* Harms** – Habit: Woody herb. Habitat: Grassland, open bushland, forest margin, on young volcanic soil, 1750–3140 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Tropical Africa.

***Macrotyloma axillare* (E.Mey.) Verdc.** – Habit: Climbing or trailing herb. Habitat: Forest edges, bushlands, 0001–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, SW Arabian Peninsula Sri Lanka, W Indian Ocean.

EX***Macrotyloma axillare* var. *glabrum* (E.Mey.) Verdc.** – Habit: Climbing or trailing herb. Habitat: Woodland, 1750–2400 m. Voucher: Gardner in FD 2855 (EA). Native distribution range: South Sudan to S Africa, W Indian Ocean.

***Mucuna stans* Welw. ex Baker** – Habit: Shrub. Habitat: Wooded grassland, 1370–1780 m. Voucher: Tweedie EM 924 (K). Native distribution range: Nigeria to W Ethiopia and S Tropical Africa.

***Neonotonia wightii* subsp. *petitiana* (A.Rich.) J.A.Lackey** – Habit: Climber herb. Habitat: Forest edges, disturbed grounds, above 1500 m. Voucher: Kahuho S 5 (US). Native distribution range: Ethiopia to Tanzania.

***Piliostigma thonningii* (Schumach.) Milne-Redh.** – Habit: Tree. Habitat: Forest, wet grassland, woodland, 1750–1900 m. Voucher: Padwa JH 29 (EA). Native distribution range: Africa, SW Arabian Peninsula.

***Pseudarthria confertiflora* (A.Rich.) Baker** – Habit: Woody herb or subshrub. Habitat: Grassland, thickets, bracken areas, 1750–2280 m. Voucher: Tweedie 1362 (EA). Native distribution range: Tropical Africa.

***Pseudarthria hookeri* Wight & Arn.** – Habit: Woody herb or shrub. Habitat: Wet grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Pterolobium stellatum* (Forssk.) Brenan** – Habit: Shrub. Habitat: Forest, Wooded grassland, grassland, bushland, 1750–2350 m. Voucher: Lugard 237 (EA). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula.

***Rhynchosia elegans* A.Rich.** – Habit: Climbing or trailing herb. Habitat: Woodland, 1750–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Malawi, SW Arabian Peninsula.

***Rhynchosia ferruginea* A.Rich.** – Habit: Climbing herb. Habitat: Uplands, subalpine grasslands, forest edges, 1750–3000 m. Voucher: Tweedie 1405 (EA). Native distribution range: Eritrea to E Central & E Tropical Africa.

***Rhynchosia hirta* (Andrews) Meikle & Verdc.** – Habit: Climbing herb or shrub. Habitat: Grassland, forest edges, 0001–1800 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, India Sri Lanka.

***Rhynchosia kilimandscharica* Volkens ex Harms** – Habit: Climbing or trailing herb. Habitat: Forest edges, grassland, bushland, 1750–2550 m. Voucher: Tweedie 721 (EA). Native distribution range: E Central & E Tropical Africa.

***Rhynchosia minima* (L.) DC.** – Habit: Climbing herb. Habitat: Forest, grassland, 150–2100 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropics & Subtropics.

EX***Rhynchosia minima* var. *prostrata* (Harv.) Meikle** – Habit: Climbing herb. Habitat: Forest, grassland, woodland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

***Rhynchosia orthobotrya* Harms** – Habit: Herb or undershrub. Habitat: Wooded grassland, 1000–2100 m. Voucher: Tweedie 1140 (K). Native distribution range: W Tropical Africa to Eritrea and Tanzania.

***Rhynchosia resinosa* (Hochst. ex A.Rich.) Baker** – Habit: Woody climbing herb. Habitat: Bushlands, 1530–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Rhynchosia usambarensis* Taub.** – Habit: Climbing herb. Habitat: Uplands grasslands, forest, 1650–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Rwanda and Tanzania.

***Senegalia goetzei* subsp. *microphylla* (Brenan) Kyal. & Boatwr.** – Habit: Tree. Habitat: Wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to South Africa.

***Senegalia persiciflora* (Pax) Kyal. & Boatwr.** – Habit: Tree. Habitat: Woodland, wooded grassland, 1750–2250 m. Vouchers: Tweedie EM 2120 (MO, BR), Eggeling WJ 2490 (BR). Native distribution range: Ethiopia to DR Congo.

[EX]***Senna bicapsularis*** **(L.) Roxb.** – Habit: Shrub or tree. Habitat: Disturbed bushland/cultivation, grassland, roadside, 100–1900 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical America.

***Senna didymobotrya*** **(Fresen.) H.S.Irwin & Barneby** – Habit: Shrub. Habitat: Forest, woodland, 1750–2440 m. Vouchers: Jackson THE 304, 2940 (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Senna petersiana*** **(Bolle) Lock** – Habit: Shrub or small tree. Habitat: Moist forest edge, wooded grassland, riverine forest, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Cameroon to Ethiopia and S Africa, Madagascar.

***Senna singueana*** **(Delile) Lock** – Habit: Shrub or tree. Habitat: Woodland, wooded grassland, 1750–2250 m. Voucher: Dale IR 664, 684 (EA). Native distribution range: Tropical Africa to NW Namibia.

***Sesbania dummeri*** **E.Phillips & Hutch.** – Habit: Shrub or small tree. Habitat: Swamps, 1100–2000 m. Vouchers: Chater-Jack 131 (EA). Native distribution range: SW Kenya to Rwanda.

***Sesbania sesban*** **(L.) Merr.** – Habit: Shrub or tree. Habitat: Stream sides, 1750–2200 m. Voucher: Lugard 196 (EA). Native distribution range: Tropical & S Africa, Arabian Peninsula, Indian Subcontinent.

***Smithia elliotii*** **Baker f.** – Habit: Herb. Habitat: Swamp in montane forest, 1170–2700 m. Voucher: Tweedie 1325 (EA). Native distribution range: Nigeria to Ethiopia and S Tropical Africa, Madagascar.

***Sphenostylis stenocarpa*** **Harms** – Habit: Climbing herb. Habitat: Wooded grassland, 50–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Tephrosia emeroides*** **A.Rich.** – Habit: Woody herb. Habitat: Upland bushland, 1600–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: NE Tropical Africa to Uganda.

***Tephrosia holstii*** **Taub.** – Habit: Herb. Habitat: Forest margin, grassland, 1750–2400 m. Voucher: Tweedie DR 718 (BR). Native distribution range: Ethiopia to Tanzania.

***Tephrosia interrupta*** **Hochst. & Steud. ex Engl.** – Habit: Shrub. Habitat: Montane grassland, thicket, 1400–3100 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Tropical Africa.

***Tephrosia nyikensis*** **Baker** – Habit: Herb or shrub. Habitat: Montane grassland, forest, 1750–2250 m. Voucher: Tweedie 465 (K). Native distribution range: Kenya to S Tropical Africa.

***Tephrosia paniculata*** **Welw. ex Baker** – Habit: Herb. Habitat: Upland grassland, swamps, 1200–2400 m. Voucher: Lugard 229 (EA). Native distribution range: Tropical Africa.

***Tephrosia vogelii*** **Hook.f.** – Habit: Woody herb. Habitat: Forest margin, old cultivations, grassland, 0–2300 m. Vouchers: Lugard in Nat. Hist. soc 6023, Lugard C & Lugard EJ 6023 (EA), Beekley 6023 (EA). Native distribution range: Tropical & S Africa.

***Teramnus repens* Baker f.** – Habit: Climbing herb. Habitat: Grassland, bushland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: NE Tropical Africa to Mozambique, Comoros, Madagascar, Arabian Peninsula, Pakistan to India.

***Teramnus uncinatus* Sw.** – Habit: Climber herb. Habitat: Forest, wooded grassland, 1700–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Mexico to Tropical America, Tropical Africa, Comoros, Madagascar.

***Teramnus uncinatus* subsp. *ringoetii* (De Wild.) Verdc.** – Habit: Climber or prostrate herb. Habitat: Forest, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

* ***Trifolium acaule* Steud. ex A.Rich.** – Habit: Herb. Habitat: Grassland, rocky alpine zone, 3300–4100 m. Voucher: Dummer RA 3309 (US). Native distribution range: Eritrea to Uganda.

***Trifolium burchellianum* Ser.** – Habit: Herb. Habitat: Forest, moorland, 1700–3700 m. Voucher: Powles 33 (K). Native distribution range: Ethiopia to S Africa.

***Trifolium cryptopodium* Steud. ex A.Rich.** – Habit: Herb. Habitat: Forest openings, alpine zone, moorland, 2100–4200 m. Vouchers: Gillett JB 18412 (WAG), Tweedie DR 28, 29, 120 (EA), Lugard C 333 (EA), Knight J 55 (EA), Webster MVB 8797 (EA), Rono et al. SAJIT-PR 0164 (EA, HIB). Native distribution range: Eritrea to Tanzania.

* ***Trifolium elgonense* J.B.Gillett** – Habit: Herb. Habitat: Forest, moorland, alpine zone, 2800–3500 m. Vouchers: Hedberg O 266 (K, S, WAG), Gillett JB 18409 (WAG). Native distribution range: Ethiopia to Uganda, (U3, K3).

* ***Trifolium lugardii* Bullock** – Habit: Herb. Habitat: Grassland, forest margin, 1700–2650 m. Voucher: Lugard 656 (EA). Native distribution range: Uganda to Kenya.

***Trifolium multinerve* A.Rich.** – Habit: Herb. Habitat: Grassland, moorland, 1800–3700 m. Voucher: Gillett JB 18407 (WAG). Native distribution range: Eritrea to Rwanda.

***Trifolium rueppellianum* Fresen.** – Habit: Herb. Habitat: Grassland, moorland, 1700–3700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Eritrea and S Tropical Africa.

***Trifolium semipilosum* Fresen.** – Habit: Herb. Habitat: Grassland, 1500–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Tropical Africa, SW Arabian Peninsula.

***Trifolium simense* Fresen.** – Habit: Herb. Habitat: Forest, woodland, 1750–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Bioko to Eritrea and Zambia.

***Trifolium steudneri* Schweinf.** – Habit: Herb. Habitat: Wet grassland, 1800–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Uganda.

***Trifolium tembense* Fresen.** – Habit: Herb. Habitat: Grassland, forest, moorland openings, alpine zone, 2000–3800 m. Voucher: Knight J 55 (EA). Native distribution range: Eritrea to Rwanda and Tanzania.

***Trifolium usambarense* Taub. ex Engl.** – Habit: Herb. Habitat: Forest, 1500–2750 m. Voucher: Beentje HJ 1962 (WAG). Native distribution range: Nigeria to Ethiopia and S Tropical Africa.

***Tylosema fassoglense* (Kotschy ex Schweinf.) Torre & Hillc.** – Habit: Herb or shrub. Habitat: Wooded grassland, grassland, bushland, 90–1900 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Africa.

***Vachellia abyssinica* subsp. *calophylla* (Brenan) Kyal. & Boatwr.** – Habit: Tree. Habitat: Montane forest, wooded grassland, woodland, 1750–2300 m. Voucher: Eggling 2475 (EA). Native distribution range: South Sudan to S Tropical Africa.

***Vachellia amythethophylla* (Steud. ex A.Rich.) Kyal. & Boatwr.** – Habit: Tree. Habitat: Woodland, wooded grassland, 1750–2400 m. Voucher: Tweedie DR 1531 (BR). Native distribution range: Tropical Africa.

***Vachellia drepanolobium* (Harms ex Y.Sjöstedt) P.J.H.Hurter** – Habit: Shrub or small tree. Habitat: Wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Sudan to Tanzania.

***Vachellia gerrardii* (Benth.) P.J.H.Hurter** – Habit: Shrub or tree. Habitat: Wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, S Israel to Arabian Peninsula.

***Vachellia hockii* (De Wild.) Seigler & Ebinger** – Habit: Shrub or tree. Habitat: Woodland, wooded grassland, 1750–2250 m. Voucher: Tweedie EM 2273 (MO). Native distribution range: Tropical Africa, SW Arabian Peninsula.

***Vachellia lahai* (Steud. & Hochst. ex Benth.) Kyal. & Boatwr.** – Habit: Tree. Habitat: Woodland, wooded grassland, 1750–2400 m. Vouchers: Eggeling WJ 2477 (MO, BR), Lugard 513 (MO). Native distribution range: Eritrea to N Tanzania.

EX ***Vachellia sieberiana* var. *woodii* (Burtt Davy) Kyal. & Boatwr.** – Habit: Tree or shrub. Habitat: Woodland, wooded grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Sudan to S Africa.

EX ***Vicia eriocarpa* (Hausskn.) Halácsy** – Habit: Trailing or climbing herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Algeria, E Mediterranean to Arabian Peninsula.

***Vicia hirsuta* (L.) Gray** – Habit: Trailing or climbing herb. Habitat: Grassland, 1950–3360 m. Voucher: Tweedie EM 875 (K). Native distribution range: Macaronesia, Temperate Eurasia, N Africa to Tanzania.

***Vicia paucifolia* Baker** – Habit: Trailing or climbing herb. Habitat: Grassland, forest edges, 1500–2750 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Congo to Ethiopia and Zambia.

***Vicia sativa* L.** – Habit: Trailing or climbing herb. Habitat: Grassland, 1700–3350 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Temperate Eurasia to Arabian Peninsula, Macaronesia, N Africa to Kenya.

***Vicia sativa* subsp. *nigra* (L.) Ehrh.** – Habit: Herb. Habitat: Woodland, forest, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Macaronesia, Temperate Eurasia, N Africa to Kenya.

EX***Vicia villosa*** **Roth** – Habit: Trailing or climbing herb. Habitat: Escape from upland cultivation, forest, grassland, 1850–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Canary Islands, N Africa, Europe to Central Asia and Afghanistan.

***Vigna friesiorum*** **Harms** – Habit: Trailing herb. Habitat: Grassland, 1600–2400 m. Vouchers: Lugard EJ (CIAT, BHAM_Maxted). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Vigna frutescens*** **A.Rich.** – Habit: Prostrate or climbing herb. Habitat: Forest, grassland, woodland, 1750–2400 m. Voucher: Tweedie DR (CIAT). Native distribution range: Tropical & S Africa.

***Vigna frutescens*** **subsp.** ***incana*** **(Taub.) Verdc.** – Habit: Trailing woody herb. Habitat: Grassland, bushland, rocky places, 0–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon, E Tropical Africa.

***Vigna heterophylla*** **A.Rich.** – Habit: Climber herb. Habitat: Grassland, 1600–2300 m. Vouchers: Tweedie DR (CIAT). Native distribution range: Cameroon to Eritrea and S Tropical Africa, SW Arabian Peninsula.

EX***Vigna hosei*** **(Craib) Backer** – Habit: Climber herb. Habitat: Woodland, lower forest edge, 1750–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Taiwan, W Malesia.

***Vigna membranacea*** **A.Rich.** – Habit: Climber herb. Habitat: Forest, bushland, woodland, 1750–2250 m. Vouchers: Tweedie EM 2229 (MO), Irwin PH (CIAT), Tweedie DR (CIAT). Native distribution range: Eritrea to Tanzania, SW Arabian Peninsula.

***Vigna monophylla*** **Taub.** – Habit: Climbing herb. Habitat: Wooded grassland, 1650–2500 m. Vouchers: Tweedie DR (CIAT, BHAM_Maxted). Native distribution range: Ethiopia to Botswana.

***Vigna parkeri*** **Baker** – Habit: Twining, prostrate, or mat forming herb. Habitat: Grassland, forest margin, 1500–2900 m. Vouchers: Symes YE 252 (EA), Major C & Lugard EJ 180 (EA). Native distribution range: Tropical Africa, Madagascar.

***Vigna parkeri*** **subsp.** ***maranguensis*** **(Taub. ex Engl.) Verdc.** – Habit: Herb. Habitat: Grassland, 1500–2900 m. Vouchers: Snowden JD 433 (NHMUK), Lugard EJ (CIAT), Snowden JD (CIAT), Tweedie DR (CIAT), Rono et al. SAJIT-PR 0224 (EA, HIB). Native distribution range: Tropical Africa, Madagascar.

***Vigna schimperi*** **Baker** – Habit: Twiner herb. Habitat: Upland grassland, forest margin, riverside, 1250–2800 m. Vouchers: Tweedie EM 423 (K), Jackson G (EA). Native distribution range: Ethiopia to Malawi.

***Vigna vexillata*** **(L.) A.Rich.** – Habit: Climbing herb. Habitat: Grassland, bushlands esp. among rocks, 100–2500 m. Vouchers: Jack C 31 (EA), Boonman 6612 (EA), Webster MVB 9191 (EA). Native distribution range: Tropics & Subtropics.

***Zornia pratensis*** **Milne-Redh.** – Habit: Herb. Habitat: Wooded grassland, 1200–2300 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Ethiopia and S Tropical Africa.

***Zornia setosa* Baker f.** – Habit: Herb. Habitat: Grassland, 1560–2350 m. Voucher: Tweedie EM 804 (K). Native distribution range: Ethiopia to Namibia.

***Zornia setosa* subsp. *obovata* (Baker f.) J.Léonard & Milne-Redh.** – Habit: Herb. Habitat: Grassland, cultivated land, 1100–2400 m. Voucher: Tweedie EM 804 (K). Native distribution range: Ethiopia to Zambia.

## F67. FUMARIACEAE

1 Genus, 1 species

***Corydalis mildbraedii* Fedde** – Habit: Herb. Habitat: Forest, bamboo forest, upland moors, grassland, 2200–3600 m. Vouchers: Tweedie 1282 (K), 1522 (EA), Thomas 523 (EA), Tothill BH 2250 (EA), Williams JG 74/11 (BR). Native distribution range: S Central Ethiopia to E Central & E Tropical Africa.

## F68. GENTIANACEAE

5 Genera, 16 species

***Anthocleista grandiflora* Gilg** – Habit: Tree. Habitat: Forest, 1500–2300 m. Vouchers: Dale U78 (EA, MO), Snowden JD 517 (MO). Native distribution range: Cameroon to South Sudan and S Africa, Comoros.

***Chironia elgonensis* Bullock** – Habit: Herb. Habitat: Swamps in grassland, 1705–2325 m. Vouchers: Lugard C & Lugard EJ 21 (EA/K). Native distribution range: Kenya to N Zambia.

***Exochaenium grande* Griseb.** – Habit: Herb. Habitat: Wooded grassland on shallow soils, 1550–2550 m. Vouchers: Tweedie DR 64 (EA), Andersen R 17 (S), Tweedie 586 (EA). Native distribution range: Nigeria to Ethiopia and S Africa.

***Sebaea brachyphylla* Griseb.** – Habit: Herb. Habitat: Wet path sides, streamside, montane grassland, heath zone, moorland, 1650–3500 m. Vouchers: Mwangangi OM 441 (EA), Knox EB 2618 (EA), Hedberg O 216 (S), Andersen R 288 (S), Rono et al. SAJIT-PR 0254 (EA, HIB). Native distribution range: Nigeria to Ethiopia and S Tropical Africa, Madagascar.

***Sebaea leiostyla* Gilg** – Habit: Herb. Habitat: Wet grassland, heath zone, 2000–3500 m. Vouchers: Hedberg O 216 (EA), Tweedie EM 17 (EA), Sileshi Nemomissa 970828-3/1(EA). Native distribution range: Ethiopia to S Africa.

***Sebaea microphylla* Knobl.** – Habit: Saprophytic herb. Habitat: Outcrop rock, forest, moist grassland and woodland, 1800–3000 m. Vouchers: Irwin PH 119 (EA), Jack C 312 (EA), Lind EM 298 (EA), Thomas AS 460 (EA). Native distribution range: Ethiopia to S Tropical Africa, Socotra, SW Arabian Peninsula, Indian Subcontinent to China (Yunnan).

***Swertia Abyssinica* Hochst.** – Habit: Herb. Habitat: Grassland, moorland, 2100–3300 m. Vouchers: Mulugeta Kekede 187, 202 (EA), Knox EB 2644 (EA), Rose

10204 (EA), Marrison 254 (EA), Tothill BH 2354 (S). Native distribution range: Bioko, Nigeria to SW Cameroon, Eritrea to Zambia.

***Swertia brownii* J.Shah** – Habit: Herb. Habitat: Forest, upland moist grassland, 1500–3000 m. Vouchers: Tweedie 835 (EA), Hedberg O 98 (S), Rono et al. SAJIT-PR 0261 (EA, HIB). Native distribution range: S Ethiopia to E Central & E Tropical Africa.

****Swertia crassiuscula* Gilg** – Habit: Herb. Habitat: Stony, swampy shallow black loam soils, lower alpine mooorland zones, 2700–4500 m. Vouchers: Tweedie 44, 3890 (EA), Mwangangi OM 311 (EA), Bickford N 18, 48 (EA), Tweedie DR 128, (EA), Williams 2147 (EA), Taylor G & Verdcourt B 2477 (EA), Rono et al. SAJIT-PR 0140 (EA, HIB), Dummer RA 3750 (K), Hedberg 144 (EA), 963 (S) Rose 10206 (EA), Saund & Hancock 90 (EA), Hedberg 963 (EA), Lye 1412 (EA). Native distribution range: SE Uganda to N Tanzania.

***Swertia kilimandscharica* Engl.** – Habit: Herb. Habitat: Montane, subalpine grassland, 2100–3840 m. Vouchers: Lye KA 1456 (EA), Hedberg O 261 (S), 4501 (EA), Gosnell JM 60, 630 (EA), Rauh W 598 (EA), Kirika P Mbale M & Muthoka P (EA), Rono et al. SAJIT-PR 0137 (EA, HIB). Native distribution range: Ethiopia to N Malawi.

***Swertia lugardae* Bullock** – Habit: Herb. Habitat: Upper forest edge, grassland, moorland, 3000–4321 m. Vouchers: Sileshi 970827-2/6 (EA), Tothill BH 2347 (EA), Mulugeta Kekede 203 (EA), Hedberg KO 4508 (K), Tweedie DR 4032 (EA), Mwangangi OM 317 (EA), Major C & Lugard EJ 409 (EA, K), Bickford N 50 (EA), Kirika P & Muthoka P 1171 (EA). Native distribution range: Ethiopia to SE Uganda.

****Swertia subnivalis* T.C.E.Fr.** – Habit: Herb. Habitat: Rare in wet mossy communities of alpine zone, along streams, 3600–4321 m. Vouchers: Hedberg O 879 (EA, BR), 1018 (S). Native distribution range: Ethiopia to Central Kenya.

***Swertia tetrandra* Hochst.** – Habit: Herb. Habitat: Moist grassland, 1550–2250 m. Vouchers: Tweedie 397 (EA), Lind EM 294 (EA). Native distribution range: Ethiopia to E Zimbabwe.

*****Swertia uniflora* Mildbr.** – Habit: Herb. Habitat: Rare in alpine grassland, 3750–4321 m. Vouchers: Dale IR 3089 (EA), Simkin J 970828-3/4 (EA), Adamson J 488 (EA) Hedberg O 926 (EA, S), Tweedie DR 10 (EA), Sileshi Nemomissa 970828-3/5 (EA), Eggeling WJ 5754 (EA), Knox EB 2619 (EA). Native distribution range: E Uganda to W Kenya (Mt. Elgon).

***Swertia usambarensis* Engl.** – Habit: Herb. Habitat: Montane grassland, 1600–3900 m. Vouchers: Bie SW 269 (EA), Sileshi Nemomissa 970827-2/3 (EA), Mwangangi OM 317 (EA). Native distribution range: Cameroon, Ethiopia to S Tropical Africa.

***Swertia welwitschii* Engl.** – Habit: Herb. Habitat: Marshes, roadsides, wet grassland 1845–2400 m. Voucher: Jack C 28 (EA). Native distribution range: Ethiopia to S Africa.

## F69. GERANIACEAE

3 Genera, 10 species

***Geranium aculeolatum* Oliv.** – Habit: Trailling or climbing herb. Habitat: Woodland, montane forest, 1800–3400 m. Voucher: Rono et al. SAJIT-PR 0226 (EA, HIB). Native distribution range: Ethiopia to N Mozambique.

***Geranium arabicum* Forssk.** – Habit: Herb. Habitat: Grassland, montane forest, alpine belt, 1800–3940 m. Vouchers: Tothill BH 2377 (EA), Beentje HJ 1960 (WAG). Native distribution range: Egypt to Tropical Africa, Madagascar, SW Arabian Peninsula.

EX***Geranium bequaertii* De Wild.** – Habit: Herb. Habitat: Grassland, roadside, 1500–2100 m. Voucher: Snowden JD 425 (NHMUK). Native distribution range: E DR Congo.

****Geranium kilimandscharicum* Engl.** – Habit: Prostrate herb. Habitat: Upper moor, upland grassland, forest, alpine zones, 2260–4300 m. Vouchers: Major EJ; Lugard EJ 411 (K), Lugard C 328 (K), Synge 976 (EA), Forbes 271 (EA), Hooper SS; Townsend CC 1463 (K), Irwin PH 122 (K), Tweedie DR 37 (K), Tweedie 1391 (K), Synge PM 1895 (NHMUK). Native distribution range: E Tropical African Mountains.

EX***Geranium mascatense* Boiss.** – Habit: Herb. Habitat: Forest, woodland, 1600–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Egypt and NE Tropical Africa, Arabian Peninsula, SW & S Iran to NW India.

***Geranium purpureum* Vill.** – Habit: Herb. Habitat: Montane forest, woodland, 2200–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, Europe to Iran and Tanzania.

***Geranium vagans* Baker** – Habit: Herb. Habitat: Montane forest grassland, alpine zones, 2640–4321 m. Vouchers: Naiga 52 (K), Hedberg 844, Thomas AS 596 (EA), Rauh W 599 (EA), Adamson J 496 (EA), Luyard EF 356 (EA). Native distribution range: E Tropical Africa to E Zambia.

***Monsonia angustifolia* E.Mey.** – Habit: Herb. Habitat: Open woodland, grassland, river banks, wet grasslands, 1200–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria, Eritrea to S Africa, Madagascar.

EX***Pelargonium alchemilloides* (L.) L'Hér.** – Habit: Herb. Habitat: Grassland, wooded grassland, outcrop rock, 1000–2800 m. Voucher: Rono et al. SAJIT-PR 0082 (EA, HIB). Native distribution range: E Zimbabwe to S Africa.

***Pelargonium whytei* Baker** – Habit: Herb. Habitat: Montane forest, heath zone, 1700–3500 m. Voucher: Synge 1925 (EA). Native distribution range: Central Ethiopia to Zambia.

## F70. HAMAMELIDACEAE

1 Genus, 2 species

***Trichocladus ellipticus* Eckl. & Zeyh.** – Habit: Shrub or tree. Habitat: Upland forest, streams, swampy areas, 1750–2700 m. Voucher: Rono et al. SAJIT-PR 0068 (EA, HIB). Native distribution range: Subtropical Africa to South Africa.

***Trichocladus ellipticus* subsp. *malosanus* (Baker) Verdc.** – Habit: Shrub or tree. Habitat: Moist forest, 2000–2300 m. Voucher: Pole-Evans IB & Erens J 1502 (US). Native distribution range: Ethiopia to S Tropical Africa.

## F71. HYPERICACEAE

2 Genera, 11 species

***Harungana madagascariensis* Poir.** – Habit: Tree. Habitat: Forest, 1200–1800 m. Voucher: Snowden JD 967 (EA). Native distribution range: Tropical & S Africa, W Indian Ocean.

***Hypericum annulatum* Moris** – Habit: Herb. Habitat: Grassland, 1100–2700 m. Vouchers: Maitland 1180 (EA), Snowden JD 522 (EA). Native distribution range: Sardegna, N & Central Balkan Peninsula, NE & E Tropical Africa, Arabian Peninsula.

**Hypericum annulatum* subsp. *afromontanum* (Bullock) N.Robson** – Habit: Herb. Habitat: Upland and moor grassland, 3000–3700 m. Vouchers: Snowden JD 479 (EA), Thomas AS 2700 (EA), Dummer RA 3301 (EA), Lugard 338a (EA), Gardner 2259 (EA). Native distribution range: SE Ethiopia to N Tanzania.

**Hypericum kiboense* Oliv.** – Habit: Shrub. Habitat: Forest edge, 2100–3900 m. Vouchers: Dummer RA 3504 (EA), Liebenberg 1659 (EA), Soumdy & Hancock 60 (EA), Lugard C 323 (K), Townsend CC 2324 (K), Kisalye N 108 (K), George Taylor 3614 (BR), Katende 1120 (K). Native distribution range: E Tropical African Mountains.

*EX Hypericum lanceolatum* Lam.** – Habit: Shrub or tree. Habitat: Forest, bushland, streamside, grassland, 1800–3360 m. Vouchers: Eggeling 2460 (EA), Tweedie 876 (EA). Native distribution range: Comoros, Réunion.

***Hypericum peplidifolium* A.Rich.** – Habit: Herb. Habitat: Alpine and subalpine grassland and stream edges, 1350–3600 m. Vouchers: Tweedie 455 (EA), George Taylor 3660 (BM), Lugard EJ 205 (EA), Adamson J 467 (EA), Jack C 74 (EA), Mamwaring Miss 2667 (EA), Rono et al. SAJIT-PR 0060 (EA, HIB). Native distribution range: Bioko to Eritrea and S Tropical Africa.

***Hypericum quartinianum* A.Rich.** – Habit: Shrub. Habitat: Grassland, woodland, gullies, river banks, 1750–2250 m. Vouchers: Chandler 432 (EA), Thomas AS 2607 (EA), Lugard 59 (EA), Tweedie 560, Tweedie DR 7 (EA), Gardner HM 2255 (EA), Jack C 39 (EA), Webb P 8751 (EA). Native distribution range: Ethiopia to S Tropical Africa, SW Arabian Peninsula.

***Hypericum revolutum* subsp. *keniense* (Schweinf.) N.Robson** – Habit: Shrub or small tree. Habitat: Forest, 2250–3550 m. Vouchers: Thorold 2747 (EA), Humphreys, G 1026 €, Agnew ADQ; Agnew S 7284 (WAG), Rono et al. SAJIT-PR 0249 (EA, HIB). Native distribution range: E Central & E African Mountains.

***Hypericum revolutum* Vahl** – Habit: Shrub or small tree. Habitat: Forest, 2250–3150 m. Vouchers: Mulugeta Kebede 205, 204, 185 (EA), Tweedie 63 (EA), Milne-Redhead E 181 (EA), Lugard EJ 472 (EA). Native distribution range: SE Nigeria to Bioko, Eritrea to South Africa, SW Arabian Peninsula.

***Hypericum roeperianum* G.W.Schimp. ex A.Rich.** – Habit: Shrub or small tree. Habitat: Forest, bamboo thickets, grassland, 1500–2900 m. Voucher: Tothill BH 2688 (EA). Native distribution range: Guinea, Nigeria to W Cameroon, Ethiopia to South Africa.

***Hypericum scioanum* Chiov.** – Habit: Herb. Habitat: Upland moor, 1830–3600 m. Vouchers: Thomas AS 570 (EA), Hedberg O 182 (EA), 4502 (EA), Arnstein Lyle 5730 (EA), Mwangangi OM 477 (EA), Thorold CA 2744 (EA), Muthama M & Gehrke B 128 (EA), Knox EB 3844 (EA). Native distribution range: Ethiopia to NE Zambia.

## F72. LAMIACEAE

25 Genera, 79 species

***Achyrospermum schimperi* Perkins** – Habit: Shrub. Habitat: Montane forest undergrowth, forest edge, associated bushland, 1200–3000 m. Vouchers: Snowden JD 1017 (EA), Chandler 1000 (EA), Mwangangi OM 305 (EA). Native distribution range: Ethiopia to N Tanzania.

[EX]***Aeollanthus pubescens* Benth.** – Habit: Herb. Habitat: Outcrop rock, woodland, 1800–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: W Tropical Africa to W Tanzania and Zambia.

***Aeollanthus repens* Oliv.** – Habit: Herb. Habitat: Forest, wooded grassland, 1550–3000 m. Vouchers: Lind EM 449 (EA), Rono et al. SAJIT-PR 0040 (EA, HIB). Native distribution range: South Sudan to Mozambique.

***Aeollanthus suaveolens* Mart. ex Spreng.** – Habit: Herb. Habitat: Outcrop rock, cultivation, 1550–2400 m. Voucher: Rono et al. SAJIT-PR 0112 (EA, HIB). Native distribution range: Tropical & S Africa.

***Ajuga integrifolia* Buch.-Ham.** – Habit: Herb. Habitat: Grassland, forest, woodland, forest, 1100–3400 m. Voucher: Rono et al. SAJIT-PR 0148 (EA, HIB). Native distribution range: NE & E Tropical Africa, Arabian Peninsula, Afghanistan to W New Guinea.

***Clerodendrum johnstonii* Oliv.** – Habit: Shrub or small tree. Habitat: Montane forest, thicker or disturbed scrubland, 1300–2550 m. Voucher: Snowden JD 515 (EA). Native distribution range: SW Ethiopia to Zambia.

***Clerodendrum rotundifolium* Oliv.** – Habit: Shrub or small tree. Habitat: Wet savanna, bushland, rocky places, stream banks, short grassland, 1750–2250 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon to South Sudan and Mozambique.

***Clinopodium abyssinicum* Kuntze** – Habit: Herb. Habitat: Woodland, 1750–3000 m. Vouchers: Beentje HJ 1934 (UPS), Dummer RA 3609 (US). Native distribution range: NE Tropical Africa to N Tanzania, SW Arabian Peninsula.

****Clinopodium kilimandschari* (Gürke) Ryding** – Habit: Trailing herb. Habitat: Alpine zones, 2900–4400 m. Vouchers: Tothill BH 2444 (EA), Wesche K 63 (EA), Hedberg O 264 (K), Tweedie 3 (K). Native distribution range: Ethiopia (Bale Mountains) to N Tanzania.

***Clinopodium simense* Kuntze** – Habit: Herb. Habitat: Upper montane forest edges, heath zone, 1700–3500 m. Vouchers: Dummer RA 3662 (EA), Beentje 1942 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

****Clinopodium uhligii* (Gürke) Ryding var. *uhligii*** – Habit: Herb/subshrub. Habitat: Heaths, woodland, upper forest edge, 1750–4180 m. Vouchers: Townsend CC 2325 (EA), Hedberg 4562 (EA), Dummer RA 3337 (EA), Wood GH 141 (EA), Lugard 363 (EA). Native distribution range: Tropical African Mountains.

***Clinopodium uhligii* var. *obtusifolium* (Avetta) Ryding** – Habit: Herb/subshrub. Habitat: Woodland, forest, upper forest edge, 1750–3150 m. Voucher: Thomas AS 2687 (EA). Native distribution range: Tropical African Mountains.

***Coleus aegyptiacus* (Forssk.) A.J.Paton** – Habit: Herb or shrub. Habitat: Outcrop rock, old cultivation, 1300 m. Voucher: Chandler 590 (EA). Native distribution range: Eritrea to Tanzania, SW Arabian Peninsula.

***Coleus alpinus* Vatke** – Habit: Herb. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Nigeria to Ethiopia and Malawi.

***Coleus barbatus* (Andrews) Benth. ex G.Don** – Habit: Shrub. Habitat: shallow soil, 880–2950 m. Vouchers: Padwa JH 36 (EA), Fack WC (92), Templer JT 244 (EA) Bush RZ 255 (EA). Native distribution range: Eritrea to Tanzania, Arabian Peninsula Indian Subcontinent to S Central China.

***Coleus bojeri* Benth.** – Habit: Herb. Habitat: Rocky grassland, woodland, disturbed grounds, forest clearing, 1200–2670 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Madagascar.

***Coleus caninus* subsp. *flavovirens* (Gürke) A.J.Paton** – Habit: Herb. Habitat: Rock outcrops, eroded grasslands, 1750–2250 m. Voucher: Tweedie 1736 (EA). Native distribution range: Ethiopia to S Africa.

***Coleus comosus* Hochst. ex Gürke** – Habit: Herb or weak shrub. Habitat: acacia-commiphora bushland, 1000–2790 m. Voucher: Rono et al. SAJIT-PR 0207 (EA, HIB). Native distribution range: Eritrea to E Tanzania.

***Coleus cylindraceus* (Hochst. ex Benth.) A.J.Paton** – Habit: Herb. Habitat: Forest, grassland, outcrop rock, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Arabian Peninsula, S India.

***Coleus deflexifolius* (Baker) A.J.Paton** – Habit: Herb. Habitat: Wooded grassland, weed in disturbed grounds, 1705–2210 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: E Tropical Africa.

***Coleus defoliatus* (Hochst. ex Benth.) A.J.Paton** – Habit: Herb. Habitat: Wooded grassland, Forest, 1700–2400 m. Vouchers: Gillett JB 20949 (EA, WAG), Gardener 2254. Native distribution range: Ethiopia to S Tropical Africa.

***Coleus kivuensis* Lebrun & L.Touss.** – Habit: Herb. Habitat: Stony bushland, thicket edges, 1500–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to N Tanzania.

***Coleus lactiflorus* Vatke** – Habit: Shrub. Habitat: Rock outcrop, forest, woodland, wooded grassland, 1100–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to N & NW Tanzania.

***Coleus lanuginosus* Hochst. ex Benth.** – Habit: Herb. Habitat: Woodland, rock outcrop, grassland, forest, 1750–2400 m. Vouchers: Irwin PH 211 (EA), Rono et al. SAJIT-PR 0122 (EA, HIB). Native distribution range: Eritrea to N Tanzania, SW Arabian Peninsula

***Coleus maculosus* subsp. *edulis* (Vatke) A.J.Paton** – Habit: Herb. Habitat: Woodland, bamboo zone, forest, upper forest edge, 1750–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Coleus meyeri* (Gürke) A.J.Paton** – Habit: herb or shrub. Habitat: Montane forest, by streams, 1550–3100 m. Voucher: Dale U19 (EA). Native distribution range: W Tropical Africa to Ethiopia and Tanzania.

***Coleus niamniamensis* (Gürke) A.J.Paton** – Habit: Herb. Habitat: Swampy grassland, 900–2100 m. Vouchers: Lindblom sn (K) Tweedie 2918 (EA). Native distribution range: South Sudan to Kenya.

[EX]***Coleus rotundifolius* (Poir.) A.Chev. & Perrot** – Habit: Herb. Habitat: Grassland, wet savanna, outcrop rock, 1400–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Asia.

***Coleus stachyoides* (Oliv.) E.A.Bruce** – Habit: Shrub. Habitat: Grassland or open acacia woodland. Voucher: Chandler 949 (EA). Native distribution range: Central African Republic to E Tropical Africa.

***Coleus stuhlmannii* (Gürke) A.J.Paton** – Habit: Herb. Habitat: Marshes, wet savanna, 1860–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to S Tropical Africa.

***Coleus sylvestris* (Gürke) A.J.Paton & Phillipson** – Habit: Shrub. Habitat: Montane forest, bamboo zone, 1750–3300 m. Vouchers: Tweedie EM 882 (K), Mwangangi OM 374 (BR). Native distribution range: Tropical Africa, Madagascar.

***Coleus tetradenifolius* (A.J.Paton) A.J.Paton** – Habit: Shrub. Habitat: Rocky places, cliffs 1350–2700 m. Voucher: Rono et al. SAJIT-PR 0113 (EA, HIB). Native distribution range: Cameroon, South Sudan to E Tropical Africa.

***Coleus xylopodus* (Lukhoba & A.J.Paton) A.J.Paton** – Habit: Subshrub. Habitat: Open Combretum woodland, rock outcrop, grassland prone to burning, 1200–2250 m. Voucher: Tweedie 1799 (EA). Native distribution range: S Ethiopia to Uganda.

***Equilabium agnewii* (Lukhoba & A.J.Paton) Mwany. & A.J.Paton** – Habit: Herb. Habitat: Rocky grassland, 1700–1900 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: E Tropical Africa.

***Equilabium caespitosum* (Lukhoba & A.J.Paton) Mwany. & A.J.Paton** – Habit: Herb. Habitat: Rocky wooded grassland, 1850–2850 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to N Tanzania.

***Equilabium kamerunense* (Gürke) Mwany. & A.J.Paton** – Habit: shrub. Habitat: Montane forest margins, bamboo zone, 1500–2950 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Cameroon, S Ethiopia to E Tropical Africa.

***Equilabium laxiflorum* (Benth.) Mwany., A.J.Paton & Culham** – Habit: Herb. Habitat: Woodland, forest, bamboo zone, 1750–3000 m. Voucher: Rono et al. SAJIT-PR 0182 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Equilabium parvum* (Oliv.) Mwany. & A.J.Paton** – Habit: Herb. Habitat: Forest, grassland, woodland, 1700–2900 m. Vouchers: Tweedie 1332 (EA), Bogdan 1411 (EA). Native distribution range: Uganda to N Zambia.

***Equilabium pauciflorum* (Baker) Mwany. & A.J.Paton** – Habit: Herb. Habitat: Woodland, thickets, grassland, rock outcrop, 1750–2100 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Uganda to Zambia.

***Fuerstia africana* T.C.E.Fr.** – Habit: Herb or subshrub. Habitat: Grassland, Acacia scrub, 1200–2550 m. Voucher: Lind EM 2584 (EA). Native distribution range: Ethiopia to Tanzania.

***Haumaniastrum caeruleum* (Oliv.) P.A.Duvign. & Plancke** – Habit: Herb. Habitat: Wooded grassland, 2015–2325 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Haumaniastrum villosum* (Benth.) A.J.Paton** – Habit: Herb. Habitat: Moist outcrop rock, open woodland, open grassland, 1700–2400 m. Vouchers: Tweedie 2920, 4139 (EA). Native distribution range: Tropical Africa, Madagascar.

***Hoslundia opposita* Vahl** – Habit: Shrub. Habitat: Roadside, forest, grassland, woodland, 750–2170 m. Voucher: Jack C 227 (EA). Native distribution range: Tropical & S Africa, Madagascar.

***Leonotis nepetifolia* (L.) R.Br.** – Habit: Herb. Habitat: Forest, weed of cultivation, 1000–2290 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa, Indian Subcontinent.

***Leonotis ocymifolia* (Burm.f.) Iwarsson** – Habit: Herb or shrub. Habitat: Forest, disturbed places, 1770–3360 m. Vouchers: Tweedie 8 (EA), Lugard C 113 (EA). Native distribution range: Eritrea to S Africa.

***Leonotis ocymifolia* var. *raineriana* (Vis.) Iwarsson** – Habit: Shrub. Habitat: Woodland, lower and upper forest edge, grassland, 1750–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to S Africa.

****Leucas argentea* Gürke** – Habit: Herb or shrub. Habitat: Disturbed bushland, 1200–3350 m. Vouchers: Gillett JB20959 (EA), Thomas AS 554, 2382 (EA), Wood GH 123 (EA), Dummer RA 3581 (US), Rono et al. SAJIT-PR 0209 (EA, HIB). Native distribution range: Ethiopia to Kenya.

***Leucas calostachys* Oliv.** – Habit: Shrub. Habitat: Secondary bushlands, forest, grassland, 1600–2575 m. Vouchers: Hedberg 318 (EA). Native distribution range: S Ethiopia to Tanzania and DR Congo.

***Leucas deflexa* Hook.f.** – Habit: Herb. Habitat: Open grassland, disturbed moist forest, 1600–2500 m. Voucher: Mwangangi OM 306 (EA). Native distribution range: Tropical Africa.

***Leucas martinicensis* (Jacq.) R.Br.** – Habit: Herb. Habitat: Forest, in cultivation, 0–2200 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World.

****Leucas masaiensis* Oliv.** – Habit: Trailing herb. Habitat: Upland grassland, 1280–2735 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to N Tanzania.

****Leucas masaiensis* var. *tricrenata* (Bullock) Sebald** – Habit: Herb. Habitat: Forest, 2250–3150 m. Vouchers: Tweedie 1525 (K), Tweedie EM 1425 (MO), Lugard CE|Lugard EJ 471 (MO), Irwin PH 221 (K), Wesche K 1437 (K), Sheil D; Katende T 2063 (K). Native distribution range: Kenya.

****Leucas masaiensis* var. *venulosa* (Baker) Sebald** – Habit: Herb. Habitat: Woodland, forest, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya to N Tanzania.

[EX]***Leucas tettensis* Vatke** – Habit: Herb. Habitat: Woodland, forest, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Rwanda to S Tropical Africa.

***Mentha aquatica* L.** – Habit: Herb. Habitat: Marshes, 1950–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Africa, Europe to Central Siberia and W Asia.

***Micromeria imbricata* C.Chr.** – Habit: Subshrub or woody herb. Habitat: Upland grassland, 1750–4300 m. Vouchers: Mwangangi OM 370 (BR), Rono et al. SA-JIT-PR 0210 (EA, HIB). Native distribution range: Africa to Arabian Peninsula.

***Micromeria imbricata* var. *villosa* (Elly Walther & K.H.Walther) Ryding** – Habit: Subshrub. Habitat: Heath zone, grasslands, bushlands, 1850–4100 m. Voucher: Wesche K 192 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Nepeta azurea* R.Br.** – Habit: Herb. Habitat: Bushed grassland, forest, upper forest edge, 1700–3700 m. Vouchers: Tothill BH 2315 (EA), Thomas 2656 (EA), Hedberg 4530 (EA), Tweedie EM 880 (K), Synge PM 854 (BR), Dummer RA 3307 (K), Battiscombe E 673 (US). Native distribution range: NE & E Tropical Africa.

***Ocimum africanum* Lour.** – Habit: Herb. Habitat: Damp disturbed grounds, 1800–2250 m. Voucher: Hancock 2388 (EA). Native distribution range: Tropical & Subtropical Old World.

***Ocimum gratissimum* L.** – Habit: Shrub. Habitat: Bushland, forest, woodland, 1100–2400 m. Voucher: Hurni MPP? 215 (EA). Native distribution range: Tropical & Subtropical Old World.

***Ocimum kilimandscharicum* Gürke** – Habit: Shrub. Habitat: Wet savanna, woodland, 1750–2400 m. Voucher: Webster MVB 8974 (EA). Native distribution range: Ethiopia to E Tropical Africa.

***Ocimum lamiifolium* Hochst.** – Habit: Herb or shrub. Habitat: Montane forest edges, grassland, 1550–2500 m. Vouchers: Irwin PH 213 (EA), Rono et al. SAJIT-PR 0073 (EA, HIB). Native distribution range: Cameroon to Eritrea and Zambia.

EX***Orthosiphon rubicundus* Benth.** – Habit: Herb. Habitat: Forest, grassland, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Himalaya to Hainan and Indo-China.

***Orthosiphon schimperi* Benth.** – Habit: Herb. Habitat: Wooded grassland, grassland, 1600–2635 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Orthosiphon thymiflorus* (Roth) Sleesen** – Habit: Herb. Habitat: Wooded grassland, forest, bushland, 1750–2400 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa, India to Indo-China, Central.

***Platostoma rotundifolium* (Briq.) A.J.Paton** – Habit: Herb. Habitat: Swampy grassland, 1500–2800 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa.

***Premna angolensis* Gürke** – Habit: Tree. Habitat: Forest edge, bushland, grassland, 900–1800 m. Voucher: Snowden JD 887 (EA). Native distribution range: Tropical Africa.

***Rotheca myricoides* (Hochst.) Steane & Mabb.** – Habit: Subshrub or shrubby herb or small tree. Habitat: Grassland, scrub, forest clearing, grazed bushland, 1180–2400 m. Vouchers: Tweedie DR 159 (BR), Eggeling WJ 2443 (BR), Rono et al. SAJIT-PR 0078 (EA, HIB). Native distribution range: Eritrea to S Africa.

EX***Salvia coccinea* Buc'hoz ex Etl.** – Habit: Herb. Habitat: Forest, 500–2000 m. Voucher: Padwa JH 28 (EA). Native distribution range: SE America to N Argentina.

***Salvia merjamie* Forssk.** – Habit: herb. Habitat: Burnt grassland, 2300–4100 m. Vouchers: Lye 1457 (EA), Wesche K 101 (EA), Adane Asefa (O). Native distribution range: Eritrea to N Tanzania, SW Arabian Peninsula.

***Salvia nilotica* Juss. ex Jacq.** – Habit: Herb. Habitat: Grassland and forest edges, 1800–3700 m. Vouchers: Hedberg O 3600 (EA), Tothill BH 2386 (EA), Stein W Bie (UPS). Native distribution range: Eritrea to S Tropical Africa.

***Scutellaria schweinfurthii* subsp. *paucifolia* (Baker) A.J.Paton** – Habit: Herb. Habitat: Wooded grassland, grassland subject to burning, 900–2600 m. Voucher: Snowden JD 1048 (EA). Native distribution range: Tropical Africa.

***Scutellaria violascens* Gürke** – Habit: Herb. Habitat: Bushland, grassland, montane forest, 1200–2400 m. Voucher: Irwin PH 150 (EA). Native distribution range: Tropical Africa.

***Stachys aculeolata* Hook.f.** – Habit: Trailing herb. Habitat: Montane forest, alpine zone, 2920–3650 m. Voucher: Beentje HJ 1991 (WAG). Native distribution range: Tropical Africa.

***Stachys aculeolata* var. *aculeolata*** – Habit: Herb. Habitat: Bamboo/ericaceous belt, upper edge of forest, 1400–3750 m. Vouchers: Tweedie 1427 (EA), Tothill BH 2379 (EA). Native distribution range: Tropical Africa.

***Stachys argillicola* Sebsebe** – Habit: Herd or shrub. Habitat: Grassland, 1500–2550 m. Voucher: Taylor 3868 (EA). Native distribution range: NE & E Tropical Africa.

***Tinnea aethiopica* Kotschy ex Hook.f.** – Habit: Shrub or herb. Habitat: Grassland, wooded grassland, 1750–2300 m. Vouchers: Hedberg O (UPS), Rono et al. SAJIT-PR 0041 (EA, HIB). Native distribution range: Tropical Africa.

***Vitex doniana* Sweet** – Habit: Tree. Habitat: Combretum woodland, elephant grassland, wet forest, 0–1950 m. Voucher: Chater-Jack 2821 (EA). Native distribution range: Tropical Africa, W Indian Ocean.

***Vitex fischeri* Gürke** – Habit: Tree. Habitat: Wooded grassland, thickets, 1200–2080 m. Vouchers: Ahenda J sn (WAG), Ahenda J; Meroka D sn (EA, WAG), Maesen LJG van der; Ahenda J 6212 (WAG). Native distribution range: South Sudan to S Tropical Africa.

## F73. LENTIBULARIACEAE

1 Genus, 4 species

***Utricularia arenaria* A.DC.** – Habit: Herb. Habitat: Grassland, seasonal swamps, outcrop rock, 387–2950 m. Vouchers: Tweedie EM 339 (K), 868(K), 578 (K). Native distribution range: Tropical & S Africa, Madagascar, Central India.

***Utricularia gibba* L.** – Habit: Aquatic/subaquatic herb. Habitat: Streams, fresh water pools, outcrop rock, 0010–2550 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World, America.

***Utricularia pentadactyla* P.Taylor** – Habit: Herb. Habitat: Outcrop rock, grassland, 1800–2400 m. Voucher: Tweedie EM 1789 (K). Native distribution range: Central Ethiopia to S Tropical Africa.

***Utricularia reflexa* Oliv.** – Habit: Aquatic herb. Habitat: Fresh water pools, 1860–2790 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa to N Botswana, Central Madagascar.

## F74. LINACEAE

1 Genus, 2 species

***Linum keniense* T.C.E.Fr.** – Habit: Herb. Habitat: Bushland in shade, roadside, streamside, 2200–3360 m. Vouchers: Hedberg 142 (EA). Native distribution range: S Ethiopia to E Tropical Africa.

***Linum volkensii* Engl.** – Habit: Herb. Habitat: Grassland, by streams, 1100–2900 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Cameroon, Ethiopia to S Tropical Africa.

## F75. LINDERNIACEAE

6 Genera, 12 species

[EX]***Bonnaya ciliata*** **Spreng.** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & Subtropical Asia to N Australia.

***Craterostigma abyssinicum*** **(Engl.) Eb.Fisch., Schäferh. & Kai Müll.** – Habit: Herb. Habitat: Rocky grasslands, woodland, grassland, riverine forest, 1750–2500 m. Vouchers: Garderner 2258 (EA), Tweedie 295 (EA). Native distribution range: Nigeria to Ethiopia and Tanzania.

***Craterostigma hirsutum*** **S.Moore** – Habit: Herb. Habitat: Outcrop rock, 350–2100 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Tropical Africa.

**Craterostigma lindernioides* **E.A.Bruce** – Habit: Herb. Habitat: Wet seasonal marshes, open grassland ponds, 1300–1600 m. Voucher: Lind EM 238 (EA). Native distribution range: E Uganda to Tanzania.

***Craterostigma newtonii*** **(Engl.) Eb.Fisch., Schäferh. & Kai Müll.** – Habit: Herb. Habitat: Marshes, 1700–2200 m. Vouchers: Rono et al. SAJIT-PR 0029, SAJIT-PR 0115 (EA, HIB). Native distribution range: Togo to Ethiopia and S Tropical Africa.

***Craterostigma plantagineum*** **Hochst.** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie 308 (EA). Native distribution range: Tropical & S Africa, SW Arabian Peninsula, India.

***Craterostigma pumilum*** **Hochst.** – Habit: Herb. Habitat: Montane grassland, outcrop rock, upland grassland, 1800–3300 m. Vouchers: Bamps PRJ 6505 (WAG), Rono et al. SAJIT-PR 0018, SAJIT-PR 0091 (EA, HIB), Snowden JD 934 (EA), Norman 261 (EA). Native distribution range: Eritrea to Botswana, Arabian Peninsula.

***Crepidorhopalon whytei*** **(Skan) Eb.Fisch.** – Habit: Herb. Habitat: Marshes, montane forests, 1300–2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: SW Ethiopia to E Central & E Tropical Africa.

***Lindernia parviflora*** **Haines** – Habit: Herb. Habitat: Ephemeral pools on rocky outcrop, 1200–2000 m. Voucher: Rono et al. SAJIT-PR 0026 (EA, HIB). Native distribution range: Africa, Indian Subcontinent to Indo-China.

***Linderniella pulchella*** **(Skan) Eb.Fisch., Schäferh. & Kai Müll.** – Habit: Herb. Habitat: Pools on outcrop, outcrop rocks, 400–2300 m. Vouchers: Lind EM 296 (EA), Rono et al. SAJIT-PR 0038, SAJIT-PR 0115 (EA, HIB). Native distribution range: Ethiopia to S Africa.

***Linderniella wilmsii*** **(Engl.) Eb.Fisch., Schäferh. & Kai Müll.** – Habit: Herb. Habitat: Granite rock outcrop, 900–2300 m. Voucher: Tweedie 1192 (EA). Native distribution range: W Central Kenya to S Africa.

***Vandellia diffusa*** **L.** – Habit: Herb. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: NE Turkey to Caucasus, Tropical Africa, Madagascar.

## F76. LORANTHACEAE

7 Genera, 9 species

***Agelanthus brunneus* (Engl.) Tiegh.** – Habit: Shrub. Habitat: Forest, swamps, riverine forest, 1000–1800 m. Vouchers: Tweedie 1951, Tweedie EM 925 (K). Native distribution range: Tropical Africa.

****Agelanthus entebbensis* (Sprague) Polhill & Wiens** – Habit: Shrub. Habitat: Forest, 1100–2100 m. Vouchers: Snowden JD 1053 (MO), Chater-Jack EM 372 (MO). Native distribution range: Uganda to W Kenya.

***Englerina woodfordioides* (Schweinf. ex Engl.) Balle** – Habit: Shrub. Habitat: Montane forest, 1350–3050 m. Vouchers: Jackson L 314 (EA), Tweedie EM, Snowden JD 1194 (EA), Tweedie EM 1269 (K), Katende 1121 (K), Trapson Clair 1760 (EA), Jackson THE 314, (EA), Polhill RM 4863 (WAG, EA), Mwangangi OM 445 (BR), Rono et al. SAJIT-PR 0054, SAJIT-PR 0065 (EA, HIB). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Erianthemum dregei* Tiegh.** – Habit: Shrub. Habitat: Forest edges, bushlands, 1750–2590 m. Voucher: Tweedie EN 863 (K). Native distribution range: Eritrea to S Africa.

***Oncocalyx sulfureus* (Engl.) Wiens & Polhill** – Habit: Shrub. Habitat: Upland forest, 0–2680 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to N Tanzania.

***Phragmanthera usuiensis* (Oliv.) M.G.Gilbert** – Habit: Shrub. Habitat: Montane forest, 1150–2600 m. Vouchers: Padwa JH 35 (EA), Chetea J 272 (EA), Jackson THE 2993 (EA), Napier ER 2529 (EA), Kokwaro JO 2506 (EA), Tweedie EM 1131 (K), Rono et al. SAJIT-PR 0067 (EA, HIB). Native distribution range: Cameroon to SW Ethiopia and Zambia.

***Plicosepalus curviflorus* Tiegh.** – Habit: Shrub. Habitat: Bushland, wooded grassland, 500–2320 m. Vouchers: Tweedie EM 1153 (K, UPS). Native distribution range: SE Egypt to E Central & E Tropical Africa.

***Tapinanthus buvumae* (Rendle) Danser** – Habit: Shrub. Habitat: Wooded grasslands, 750–1200 m. Voucher: Tweedie 118 (EA). Native distribution range: E Central & E Tropical Africa.

***Tapinanthus constrictiflorus* (Engl.) Danser** – Habit: Shrub. Habitat: Forest, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Gabon to Kenya and Angola.

## F77. LYTHRACEAE

3 Genera, 6 species

**[EX]*Ammannia aegyptiaca* Willd.** – Habit: Herb. Habitat: Forest, grassland, outcrop rock, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Egypt to Angola, India.

***Ammannia prieuriana* Guill. & Perr.** – Habit: herb. Habitat: Grassland, pools on rock outcrop, cultivation, 1800–2250 m. Voucher: Tweedie 1492 (EA). Native distribution range: Tropical & S Africa to Israel.

***Ammannia schinzii* (Koehne) S.A.Graham & Gandhi** – Habit: Herb or subshrub. Habitat: Outcrop rock, 1800–2400 m. Voucher: Syme 317 (EA). Native distribution range: S Tropical & S Africa.

***Ammannia wormskioldii* Fisch. & C.A.Mey.** – Habit: herb. Habitat: Roadsides, pools on rock outcrop, 1800–2400 m. Voucher: Tweedie 3473 (EA). Native distribution range: W Ethiopia to Namibia.

***Lythrum rotundifolium* Hochst. ex A.Rich.** – Habit: Aquatic or semiaquatic herb. Habitat: Along streams in open places, 1700–3300 m. Voucher: Rono et al. SAJIT-PR 0259 (EA, HIB). Native distribution range: Ethiopia to Malawi.

***Rotala repens* (Hochst.) Koehne** – Habit: Aquatic herb. Habitat: Forest, spray of waterfall, 1200–1900 m. Voucher: Wallace JRM 10a (EA). Native distribution range: Ethiopia to S DR Congo

## F78. MALVACEAE

13 Genera, 36 species

***Abutilon longicuspe* Hochst. ex A.Rich.** – Habit: Shrub. Habitat: Upland forest edges, 1650–3300 m. Vouchers: Katende; Sheil 1865 (K), Sheil; Van Heist 1980 (K), Irwin PH 46 (BR), Bickford N 15 (EA), Jack C 178 (EA). Native distribution range: NE Sudan to S Tropical Africa.

***Abutilon mauritianum* (Jacq.) Medik.** – Habit: Herb or subshrub. Habitat: Forest edge, disturbed grounds, 0–2300 m. Vouchers: Padwa JH 33, Tweedie DR 177 (BR). Native distribution range: Tropical & S Africa, Arabian Peninsula, Comoros.

***Dombeya burgessiae* Gerrard ex Harv.** – Habit: Tree or shrub. Habitat: Woodland, lower forest edge, 1750–2400 m. Vouchers: Oxtoby E 6 (EA), Dale IR 808 (EA), Fairbairn G 799 (EA), Jack C 13 (EA), Rono et al. SAJIT-PR 0049 (EA, HIB). Native distribution range: South Sudan to S Africa.

***Dombeya rotundifolia* Planch.** – Habit: Shrub or small tree. Habitat: Woodland, lower forest edge, 1750–2400 m. Voucher: Eggeling 2487 (EA). Native distribution range: S Ethiopia to S Africa.

***Dombeya torrida* (J.F.Gmel.) Bamps** – Habit: Tree. Habitat: Forest, bamboo woodland, 2250–3050 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Central African Republic to NE & E Tropical Africa, Arabian Peninsula.

***Grewia similis* K.Schum.** – Habit: Shrub or small tree. Habitat: Grassland, woodland, thickets, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Grewia stolzii* Ulbr.** – Habit: Shrub or small tree. Habitat: Riverine forest, woodland, 1750–2250 m. Voucher: Jackson 436 (EA). Native distribution range: South Sudan to S Tropical Africa.

***Grewia trichocarpa* Hochst. ex A.Rich.** – Habit: Shrub or small tree. Habitat: Acacia bush, riverine forest, grassland, 900–2150 m. Voucher: Templer JT 67 (EA). Native distribution range: Eritrea to N & Central Tanzania, SW Arabian Peninsula.

***Hibiscus aethiopicus* L.** – Habit: Herb. Habitat: Grassland, bushland, 1750–2250 m. Voucher: Symes 360 (EA). Native distribution range: Eritrea to E Central & E Tropical Africa, S Africa, and Yemen.

***Hibiscus aponeurus* Sprague & Hutch.** – Habit: Herb. Habitat: Grassland, 250–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Djibouti to N Mozambique.

***Hibiscus articulatus* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Seasonally waterlogged grasslands, 1750–2250 m. Voucher: Tweedie 1314 (EA). Native distribution range: W Tropical Africa to Ethiopia and Botswana.

***Hibiscus calyphyllus* Cav.** – Habit: Shrub or herb. Habitat: Woodland, forest, 700–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to S Africa, W Indian Ocean.

***Hibiscus cannabinus* L.** – Habit: Herb. Habitat: Grassland, 600–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

***Hibiscus diversifolius* Jacq.** – Habit: Small tree, shrub or herb. Habitat: Forest, swamps, savanna, 1330–2800 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Africa.

***Hibiscus fuscus* Garcke** – Habit: Woody herb or shrub. Habitat: Grassland, bushland, thickets, 1400–2650 m. Voucher: Rono et al. SAJIT-PR 0062 (EA, HIB). Native distribution range: Djibouti to S Africa.

***Hibiscus ludwigii* Eckl. & Zeyh.** – Habit: Shrub or herb. Habitat: Roadside, forest, 1800–3000 m. Vouchers: Snowden JD 818 (EA), Tiyoy L 1331 (K). Native distribution range: Ethiopia to Zimbabwe, South Africa.

***Hibiscus macranthus* Hochst. ex A.Rich.** – Habit: Shrub or woody herb. Habitat: Forest grassland, 1500–2900 m. Voucher: Symes 387 (EA). Native distribution range: Cameroon, Eritrea to Tanzania.

***Hibiscus vitifolius* L.** – Habit: Shrub or herb. Habitat: Forest, woodland, 420–2250 m. Voucher: Lugard 454 (EA). Native distribution range: Tropical & Subtropical Old World.

***Kosteletzkya adoensis* Mast.** – Habit: Herb or subshrub (procumbent, climbing or scrambling). Habitat: Montane forests, grassland thickets, 1200–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa, Madagascar.

***Kosteletzkya begoniifolia* Ulbr.** – Habit: Herb or subshrub. Habitat: Upland montane forest, swamps, marshes, moist thickets, 1450–2400 m. Voucher: Tweedie 820 (EA). Native distribution range: Cameroon, Ethiopia to South Tropical Africa

EX***Malva verticillata* L.** – Habit: Herb. Habitat: Bushlands, bamboo zones, alpine zones, woodland, forest, 1500–4000 m. Voucher: Tweedie DR 6 (EA). Native distribution range: NE Tropical Africa, Central Asia to Korea.

***Melhania velutina* Forssk.** – Habit: Herb or subshrub. Habitat: Riverine forest, grassland, 0010–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Eritrea to Angola, SW Arabian Peninsula.

***Melochia corchorifolia* L.** – Habit: Herb or subshrub. Habitat: Woodland, forest edge, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & Subtropical Old World.

***Pavonia burchellii* (DC.) R.A.Dyer** – Habit: Herb. Habitat: Woodland, forest edge, 1750–2400 m. Voucher: Rono et al. SAJIT-PR 0059 (EA, HIB). Native distribution range: Egypt to S Africa.

***Pavonia kilimandscharica* Gürke** – Habit: Shrub. Habitat: Bamboo zone, *Ocotea* and *Podocarpus* forest, 1200–3000 m. Voucher: Irwin PH 107 (EA). Native distribution range: Bioko, Cameroon, Ethiopia to E Central & E Tropical Africa.

***Pavonia schimperiana* Hochst. ex A.Rich.** – Habit: Shrubby herb or shrub. Habitat: Grassland, swamp edges, thickets forest, 1100–2400 m. Voucher: Tweedie 1374 (EA). Native distribution range: Tropical Africa.

***Pavonia urens* Cav.** – Habit: Shrubby herb or shrub. Habitat: Forest, 1200–3000 m. Vouchers: Ross R 1340 (BR), 1345 (BR). Native distribution range: Tropical & S Africa, Madagascar.

***Sida rhombifolia* var. *serratifolia* (R.Wilczek & Steyaert) Verdc.** – Habit: Suffrutex shrub. Habitat: Forest, disturbed places, 900–2600 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Africa.

***Sida schimperiana* Hochst. ex A.Rich** – Habit: Shrub. Habitat: Grassland, bushland, overgrazed areas, roadsides, 1200–2700 m. Voucher: Lind EM 292 (EA). Native distribution range: Eritrea to N Tanzania.

***Sida ternata* L.f.** – Habit: Herb or undershrub. Habitat: Montane forest, bamboo, pathsade, 1350–3280 m. Voucher: Naiga 503 (K). Native distribution range: Eritrea to S Africa.

***Sparrmannia ricinocarpa* Kuntze** – Habit: Shrub. Habitat: Forest, 1200–3350 m. Voucher: Dummer RA 3586 (US). Native distribution range: E Cameroon to Eritrea and S Africa, Madagascar.

***Triumfetta brachyceras* K.Schum.** – Habit: Shrub. Habitat: Woodland, forest edge, 1750–3000 m. Voucher: Dummer RA 3629 (EA). Native distribution range: Ethiopia to Burundi and Tanzania.

***Triumfetta cordifolia* A.Rich.** – Habit: Woody herb or shrub. Habitat: Montane forest, woodland, 1000–3000 m. Vouchers: Tweedie 1533 (EA), Kahuko 14 (EA). Native distribution range: W & W Central Tropical Africa.

***Triumfetta rhomboidea* Jacq.** – Habit: Herb or undershrub. Habitat: Forest, disturbed places, roadsides, 1100–2200 m. Vouchers: Chair-Jack 70 (EA), Goldschmidt W 37 (EA). Native distribution range: Tropical & Subtropical Old World.

***Triumfetta tomentosa* Bojer** – Habit: Shrub. Habitat: Forest clearings and old cultivation, 350–2100 m. Voucher: Jack C 155 (EA). Native distribution range: Tropical Africa to Namibia.

***Urena lobata* L.** – Habit: Herb. Habitat: Disturbed cultivations, roadsides, 1250–2300 m. Voucher: Rono et al. SAJIT-PR 0192 (EA, HIB). Native distribution range: Tropical & Subtropical.

## F79. MELASTOMATACEAE

3 Genera, 4 species

***Antherotoma naudinii* Hook.f.** – Habit: Herb. Habitat: Shallow soils by streams, outcrop rock, 500–2300 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Antherotoma senegambiensis* (Guill. & Perr.) Jacq.-Fél.** – Habit: Herb. Habitat: Roadside, disturbed grassland, outcrop rock, 1350–2650 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Argyrella canescens* (Graham) Harv.** – Habit: Woody herb. Habitat: Burnt or swampy grassland, 800–2200 m. Voucher: Jack C 89 (EA). Native distribution range: Nigeria to Ethiopia and S Africa.

***Dissotis speciosa* Taub.** – Habit: Woody herb or shrub. Habitat: Streamside, marshes, 1000–2250 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Uganda to NE Zambia.

## F80. MELIACEAE

4 Genera, 6 species

***Ekebergia capensis* Sparrm.** – Habit: Tree. Habitat: Woodland, upper forest adge, 1750–3000 m. Vouchers: Styles BT 315 (EA, MO), Snowden JD 965 (MO), Gillett JB 20948 (MO), Rono et al. SAJIT-PR 0105 (EA, HIB). Native distribution range: Tropical & S Africa.

***Entandrophragma angolense* C.DC.** – Habit: Tree. Habitat: Forest, 1100–1830 m. Vouchers: Styles 213 (EA), Eggeling 5602 (EA). Native distribution range: Tropical Africa.

***Entandrophragma excelsum* Sprague** – Habit: Tree. Habitat: Montane Forest, riverine forest, 1525–2150 m. Voucher: Styles 319 (EA). Native distribution range: Uganda to N Malawi.

***Lepidotrichilia volkensii* (Gürke) J.-F.Leroy** – Habit: Tree. Habitat: Forest, 1550–2600 m. Vouchers: Style 180 (EA), Rono et al. SAJIT-PR 0046 (EA, HIB). Native distribution range: Ethiopia to Burundi and Malawi.

***Turraea floribunda* Hochst.** – Habit: Shrub or tree. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: South Sudan to S Africa.

***Turraea holstii* Gürke** – Habit: Tree. Habitat: Forest, 1750–2500 m. Vouchers: Bamps PRJ 6510 (WAG), Smyes 264 (EA), Rono et al. SAJIT-PR 0006, SAJIT-PR 0194 (EA, HIB). Native distribution range: Ethiopia to Malawi.

## F81. MELIANTHACEAE

1 Genus, 2 species

***Bersama abyssinica* Fresen.** – Habit: Tree or shrub. Habitat: Grassland, 1140–2550 m. Voucher: Rono et al. SAJIT-PR 0217 (EA, HIB). Native distribution range: Tropical Africa.

***Bersama abyssinica* subsp. *paullinioides* (Planch.) Verdc.** – Habit: Tree. Habitat: Thickets, upland grassland, 1800–2400 m. Vouchers: Lugard 325 (EA), Rono et al. SAJIT-PR 0056 (EA, HIB). Native distribution range: Tropical Africa.

## F82. MENISPERMACEAE

3 Genera, 5 species

***Cissampelos mucronata* A.Rich.** – Habit: Liane. Habitat: Swamps, forest edge, 1750–2400 m. Voucher: Tweedie EM 1304 (K). Native distribution range: Tropical & S Africa.

***Cissampelos pareira* L.** – Habit: Liane. Habitat: Rain forest, 1750–3000 m. Vouchers: Beentje HJ 1971 (WAG), Rono et al. SAJIT-PR 0052 (EA, HIB). Native distribution range: Tropics & Subtropics.

***Hyalosepalum caffrum* (Miers) Troupin** – Habit: Liane. Habitat: Forest, rock outcrop, bushland, 1750–2400 m. Vouchers: Snowden JD 1034 (EA), Tweedie EM 3126 (K). Native distribution range: Ethiopia to S Africa.

***Stephania abyssinica* Walp.** – Habit: Liane. Habitat: River edges in forest, grassland, woodland, 2120–3300 m. Vouchers: Lugard 447 (EA), Gillett JB 20947 (WAG), Dummer RA 3641 (EA), Andersen R 364 (S), Granvik H 134 (S), Rono et al. SAJIT-PR 0051 (EA, HIB). Native distribution range: Tropical & S Africa.

***Stephania cyanantha* Welw. ex Hiern** – Habit: Liane. Habitat: Swamps, volcanic lava, 3000–3150 m. Vouchers: Major EJ; Lugard Cyril 502a (K) 502 (EA). Native distribution range: Sierra Leone, Bioko to Ethiopia and S Tropical Africa.

## F83. MONIMIACEAE

1 Genus, 1 species

***Xymalos monospora* Baill.** – Habit: Shrub or small to medium size tree. Habitat: Forest, 2250–3000 m. Vouchers: Mwangangi OM 417 (MO), Wesche K 1850 (MO), Rono et al. SAJIT-PR 0187 (EA, HIB). Native distribution range: SE Nigeria to W Cameroon, Gulf of Guinea Islands, S Sudan to South Africa.

**F84. MORACEAE**
3 Genera, 7 species

***Antiaris toxicaria* var. *usambarensis* (Engl.) C.C.Berg** – Habit: Tree. Habitat: Forest, riverine or semi-swampy forest, up to 1700 m. Voucher: St Clair Thomson in Eggeling 3957 (EA). Native distribution range: Uganda to N Zambia.

***Dorstenia barnimiana* Schweinf.** – Habit: Herb. Habitat: Stony grasses, 1080–2170 m. Voucher: Adamson J 450 (EA). Native distribution range: Cameroon to Yemen and Zambia.

***Dorstenia benguellensis* Welw.** – Habit: Herb. Habitat: Woodland, wooded grassland, 1000–2450 m. Voucher: Jack 262 (EA). Native distribution range: Cameroon to W Ethiopia and S Tropical Africa.

***Ficus ingens* Miq.** – Habit: Tree. Habitat: Forest, grassland, 1750–2250 m. Voucher: Walter 6 (EA). Native distribution range: S Algeria to Tropical & S Africa, Arabian Peninsula.

***Ficus natalensis* Hochst.** – Habit: Tree or shrub. Habitat: Forest, woodland, riverine forest, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ivory Coast to Sudan and S Africa.

***Ficus sur* Forssk.** – Habit: Tree. Habitat: Forest, riverine forest, wooded grassland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Africa to Arabian Peninsula.

***Ficus sycomorus* L.** – Habit: Tree. Habitat: Forest, woodland, outcrop rock, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Africa to Syria.

**F85. MYRICACEAE**
1 Genus, 2 species

***Myrica meyerijohannis* Engl.** – Habit: Shrub. Habitat: Upland grassland, moor, ericaceous zone, (1950)–2700–3700 m. Vouchers: Harnilton & Perrott 756/433 (EA), Snowden JD 814 (EA), Wesche K 1182 (EA). Native distribution range: Central Kenya to N Tanzania.

***Myrica salicifolia* Hochst. ex A.Rich.** – Habit: Shrub or tree. Habitat: Forest, 3150–4321 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Cameroon, Eritrea to Burundi, Madagascar, SW Arabian Peninsula.

**F86. MYRTACEAE**
1 Genus, 2 species

***Syzygium cordatum* Hochst.** – Habit: Tree. Habitat: Forest, grassland, 1750–2400 m. Vouchers: Edward Mwangi 216 (EA), Jackson THE 345 (EA),

Jack C 207 (EA), Eggeling WJ 2483 (EA, MO). Native distribution range: Uganda to S Africa.

***Syzygium guineense* DC.** – Habit: Tree, shrub or pyrophytic subshrub. Habitat: Riverine forest, woodland, 1750–2250 m. Vouchers: Taylor 3847 (MO), Naiper 2528 (MO), Snowden JD 1080 (MO). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

## F87. NYMPHAEACEAE

1 Genus, 2 species

***Nymphaea nouchali* Burm.f.** – Habit: Aquatic herb. Habitat: Permanent water bodies, 0–2680 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World to N Australia.

***Nymphaea nouchali* var. *caerulea* (Savigny) Verdc.** – Habit: Aquatic herb. Habitat: Permanent water bodies, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Egypt to S Africa, S Arabian Peninsula, Comoros.

## F88. OCHNACEAE

1 Genus, 4 species

***Ochna afzelii* R.Br. ex Oliv.** – Habit: Shrub or tree. Habitat: Grassland on rocky hills, bushland, forest, 1150–1350 m. Voucher: Snowden JD 873 (EA). Native distribution range: Tropical Africa.

***Ochna holstii* Engl.** – Habit: Shrub or small tree. Habitat: Forest, riverine forest, thickets, woodlands, 2250–3000 m. Vouchers: Dale IR 3121 (EA, BR), Rono et al. SAJIT-PR 0069 (EA, HIB). Native distribution range: S Central Ethiopia to S Africa.

***Ochna insculpta* Sleumer** – Habit: Shrub or tree. Habitat: Grassland, woodland, lower forest edge, 1750–2400 m. Voucher: Tweedie 21 (EA). Native distribution range: S Ethiopia to N Tanzania.

***Ochna membranacea* Oliv.** – Habit: Shrub or small tree. Habitat: Forest, 1050–2250 m. Voucher: Jackson 417 (EA). Native distribution range: Tropical Africa.

## F89. OLACACEAE

1 Genus, 1 species

***Strombosia scheffleri* Engl.** – Habit: Tree. Habitat: Rain forest, 800–2500 m. Voucher: St Clair-Thomson in Eggeling 3940 (K). Native distribution range: Nigeria to South Sudan and S Tropical Africa.

**F90. OLEACEAE**
4 Genera, 10 species

[EX]***Fraxinus quadrangulata*** **Michx.** – Habit: Tree. Habitat: Roadside, forest, 2590 m. Voucher: Rono et al. SAJIT-PR 0257 (EA, HIB). Native distribution range: N Central & E Central America.

***Jasminum abyssinicum*** **R.Br.** – Habit: Climbing shrub. Habitat: Shrubland, open and riverine forest, 900–3000 m. Voucher: Rono et al. SAJIT-PR 0225 (EA, HIB). Native distribution range: Cameroon to Eritrea and S Africa.

***Jasminum fluminense*** **Vell.** – Habit: Climbing shrub. Habitat: Woodland on shallow soil, 280–2650 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa to Arabian Peninsula.

***Jasminum grandiflorum*** **subsp.** ***floribundum*** **(R.Br. ex Fresen.) P.S.Green** – Habit: Shrub. Habitat: Bush on open ground, 400–2480 m. Vouchers: Snowden JD 831 (EA), Rono et al. SAJIT-PR 0085 (EA, HIB). Native distribution range: Eritrea to Rwanda, Arabian Peninsula.

***Olea capensis*** **L.** – Habit: Tree. Habitat: Wet land forest, 1150–2550m. Voucher: Rono et al. SAJIT-PR 0007 (EA, HIB). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Olea capensis*** **subsp.** ***macrocarpa*** **(C.H.Wright) I.Verd.** – Habit: Tree. Habitat: Forest, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Olea europaea*** **L.** – Habit: Shrub or tree. Habitat: Forest, 2250–3000 m. Vouchers: Ashburner M LCA 8 (EA), Taiti S 2 (EA), Fairbairn G 801 (EA). Native distribution range: Africa, Mediterranean to S Central China.

***Olea europaea*** **subsp.** ***cuspidata*** **(Wall. & G.Don) Cif.** – Habit: Tree. Habitat: Forest, 950–2400 m. Vouchers: Fairbairn G 801 (US), Rono et al. SAJIT-PR 0017 (EA, HIB). Native distribution range: Eritrea to S Africa, Mascarenes, Arabian Peninsula to China (Yunnan).

***Olea welwitschii*** **Gilg & G.Schellenb.** – Habit: Tree. Habitat: Forest, 2250–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to S Tropical Africa.

***Schrebera alata*** **Welw.** – Habit: shrub or tree. Habitat: Bushland and forest, 1950–2400 m. Vouchers: (Fr), Jackson THE 344a (EA), Snowden JD 1016 (EA). Native distribution range: Eritrea to S Africa.

**F91. ONAGRACEAE**
2 Genera, 4 species

***Epilobium hirsutum*** **L.** – Habit: Herb. Habitat: Swamps, woodland, 11900–2690 m. Vouchers: Major and Mrs Lugard 499 (EA), Symes YE 332 (EA), Rono et al. SAJIT-PR 0263 (EA, HIB). Native distribution range: Temperate Eurasia to Africa.

***Epilobium salignum* Hausskn.** – Habit: Woody herb. Habitat: Swampy places near streams, woodland, 1800–2830 m. Vouchers: Mrs Powles 35 (EA), Symes YE 520 (EA). Native distribution range: Tropical & S Africa, Madagascar.

***Epilobium stereophyllum* Fresen.** – Habit: Stoloniferous herb. Habitat: Swamps, moor grassland, along water course, upper forest edge, 2600–3660 m. Vouchers: Hedberg O 1000 (EA), 4449 (EA), Adamson J 491 (EA), Svein Manum 64 (O), Tweedie DR 21 (EA), Taylor G 3695 (EA), Bush RZ 250 (EA), Lisowski S 56570 (BR), Rono et al. SAJIT-PR 0260 (EA, HIB). Native distribution range: Ethiopia to Malawi.

***Ludwigia abyssinica* A.Rich.** – Habit: Herb. Habitat: Swamps, along rivers, woodland, 1000–2300 m. Voucher: Lugard C & Lugard EJ 335 (EA). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

## F92. OROBANCHACEAE

9 Genera, 26 species

***Alectra orobanchoides* Benth.** – Habit: Herb. Habitat: Woodland, grassland, montane scrub, rock outcrop, 1750–2000 m. Voucher: Tweedie 2230 (EA). Native distribution range: Uganda to S Africa.

***Alectra sessiliflora* (Vahl) Kuntze** – Habit: Herb. Habitat: Montane grassland, forest, 1850–3000 m. Vouchers: Major Lugard sn (EA), Mwangangi OM 411 (EA), Rono et al. SAJIT-PR 0157 (EA, HIB). Native distribution range: Tropical & S Africa to Philippines.

***Alectra vogelii* Benth.** – Habit: Herb. Habitat: Forest, grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Bellardia trixago* (L.) All.** – Habit: Herb. Habitat: Alpine zone, rocky places, grassland, 930–3100 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, Mediterranean to Iran and W Central Kenya, South Africa.

***Buchnera capitata* Burm.f.** – Habit: Herb. Habitat: Grassland, woodland, forest, 1750–2540 m. Vouchers: Wood 483 (EA), Irwin PH 245 (EA). Native distribution range: Tropical Africa, Madagascar.

***Buchnera hispida* Buch.-Ham. ex D.Don** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Africa, Arabian Peninsula, Indian Subcontinent.

***Buchnera nuttii* Skan** – Habit: Herb. Habitat: Wooded grassland, 1670–2170 m. Voucher: Jack C 97 (EA). Native distribution range: South Sudan to S Tropical Africa.

***Buchnera ruwenzoriensis* Skan** – Habit: Herb. Habitat: Grassland, 1200–1900 m. Vouchers: Wood 478 (EA). Native distribution range: Uganda, Angola, Zambia.

***Cycnium adonense* E.Mey. ex Benth.** – Habit: Herb. Habitat: Forest, 1750–2500 m. Vouchers: Lugard C 568 (EA), Jack C 234 (EA). Native distribution range: Tropical & S Africa.

***Cycnium erectum* Rendle** – Habit: Woody herb. Habitat: Wooded grassland, forest, grassland, 1500–2500 m. Vouchers: Tweedie 1724 (EA), Snowden JD 935 (EA), Dale 3094 (EA), Irwin PH 449 (EA). Native distribution range: Ethiopia to Uganda.

***Cycnium herzfeldianum* (Vatke) Engl.** – Habit: Herb. Habitat: Grassland, woodland, 1750–2500 m. Vouchers: Irwin PH 72 (EA), Rono et al. SAJIT-PR 0058 (EA, HIB). Native distribution range: Ethiopia to DR Congo.

***Cycnium jamesii* (Skan) O.J.Hansen** – Habit: Herb. Habitat: Marshy grasslands, wooded grassland, 1500–2550 m. Vouchers: Snowden JD 867 (EA), James E sn (K). Native distribution range: SW Ethiopia to Burundi.

***Cycnium recurvum* Engl.** – Habit: Herb. Habitat: Disturbed grassland, outcrop rock, forest, 1500–3150 m. Voucher: Tweedie 1477 (EA). Native distribution range: South Sudan to N Malawi.

***Cycnium tenuisectum* (Standl.) O.J.Hansen** – Habit: Herb or week shrub. Habitat: Upland grassy marshes, 1800–3500 m. Vouchers: Tweedie 17 (EA), Dummer RA 3399 (EA), Williams JW 74/5 (EA), Rono et al. SAJIT-PR 0127 (EA, HIB). Native distribution range: S Ethiopia to E Central & E Tropical Africa.

***Cycnium tubulosum* Engl.** – Habit: Herb. Habitat: Upland bushland, outcrop rock, 1800–3000 m. Vouchers: Symes YE 243 (EA), Lugard EJ 139 (EA), Lind EM 2153 (EA). Native distribution range: Tropical & S Africa, Madagascar.

***Hedbergia abyssinica* (Benth.) Molau** – Habit: Herb. Habitat: Woodland, upper forest edge, 1750–4300 m. Vouchers: Snowden JD 450 (S), Hedberg et al. 2101 (EA). Native distribution range: S Nigeria to Cameroon, Ethiopia to Malawi.

***Hedbergia decurva* (Hochst. ex Benth.) A.Fleischm. & Heubl** – Habit: Herb or undershrub. Habitat: Alpine belt, moorland, upper forest edge, 3150–4321 m. Vouchers: Wesche K 09 (EA), Osmaston 4011 (EA), Leibenberg 1649 (EA), Bush RZ 254 (EA), Hedberg O 868 (EA), Tweedie DR 60 (EA), Thomas AS 538 (EA), Ekkens DB 409 (EA), Mwangangi OM 316 (EA), Gardiner N 21877 (EA), Gardiner N 1345 (EA), Bitzford N 23 (EA). Native distribution range: Ethiopia to E Uganda and N Tanzania.

***Hedbergia longiflora* (Hochst. ex Benth.) A.Fleischm. & Heubl** – Habit: Herb or Undershrub. Habitat: Forest, heath zone, 2950–3840 m. Vouchers: Wilson G 1240 (EA), Hedberg O 4459 (EA), Lye and Po in Lye 23072 (EA), Tweedie 2425 (K). Native distribution range: Ethiopia to E Uganda and N Tanzania.

***Hedbergia longiflora* subsp. *macrophylla* (Hedberg) A.Fleischm. & Heubl** – Habit: herb or subshrub. Habitat: Upper forest edge, heath, afro-alpine zone, 2400–3800 m. Vouchers: Lye & Poe in Lye 23072 (EA), Hedberg 4459 (EA). Native distribution range: E Central Tropical Africa (Ruwenzori Mountains, Virunga Volcanoes).

***Micrargeria filiformis* (Schumach. & Thonn.) Hutch. & Dalziel** – Habit: Herb. Habitat: Wet grassland, seepages in woodland, outcrop rock, 1800–2400 m. Vouchers: Lind EM 472 (EA). Native distribution range: Tropical Africa, Madagascar.

***Orobanche minor* Sm.** – Habit: Herb. Habitat: Grassland, forest, 800–2480 m. Voucher: Rono et al. SAJIT-PR 0163 (EA, HIB). Native distribution range: Europe to N Iraq, Macaronesia to Arabian Peninsula.

***Sopubia eminii* Engl.** – Habit: Herb. Habitat: Grassland, 1000–2790 m. Voucher: Tweedie 691 (EA). Native distribution range: Ethiopia to S Tropical Africa.

***Sopubia ramosa* Hochst.** – Habit: Herb or undershrub. Habitat: Wooded grassland, 1600–2170 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

[EX]***Sopubia trifida* Buch.-Ham. ex D.Don** – Habit: Herb. Habitat: Outcrop rock, 1800–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: S China to Tropical Asia.

***Striga asiatica* (L.) Kuntze** – Habit: Herb. Habitat: Grassland, 0–2480 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World.

***Striga forbesii* Benth.** – Habit: Herb. Habitat: Grassland, 1060–2350 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Madagascar.

## F93. OXALIDACEAE

2 Genera, 5 species

***Biophytum abyssinicum* Steud. ex A.Rich.** – Habit: Herb. Habitat: Rocky grounds, grassland, forest, 1200–2650 m. Voucher: Jack C 49 (EA). Native distribution range: Nigeria to Eritrea.

***Oxalis anthelmintica* A.Rich.** – Habit: Herb. Habitat: Grassland, riverine forest edges, 830–2400 m. Voucher: Hedberg 810 (EA). Native distribution range: Sudan to S Tropical Africa.

[EX]***Oxalis corniculata* L.** – Habit: Herb. Habitat: Upper forest edge and moorland, 0–4100 m. Vouchers: Dummer RA 3517 (EA), Tweedie 2674, 2675, Jack C 135 (EA), Synge PM s 942 (WAG). Native distribution range: Mexico to Venezuela and Peru, Caribbean.

[EX]***Oxalis latifolia* Kunth** – Habit: Herb. Habitat: Woodland, forest, cultivation, 1300–2500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical America.

***Oxalis obliquifolia* Steud. ex A.Rich.** – Habit: Herb. Habitat: Moist rock outcrops, woodland, lower forest edge, 1750–3400 m. Voucher: Wesche K 1558 (EA). Native distribution range: Eritrea to S Africa.

## F94. PAPAVERACEAE

1 Genus, 1 species

***Fumaria abyssinica* Hammar** – Habit: Herb. Habitat: Upland Forest, bamboo, upland moor, 2100–3400 m. Vouchers: Wesche K 1781 (K, EA), Hedberg O 4473 (EA), Tothill BH 2277 (EA). Native distribution range: Eritrea to Malawi, SW Arabian Peninsula.

## F95. PASSIFLORACEAE
1 Genus, 1 species

***Adenia bequaertii* Robyns & Lawalrée** – Habit: Woody climber. Habitat: Upland forest, riverine forest, 1350–2300 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: E DR Congo to SW Kenya.

## F96. PEDALIACEAE
1 Genus, 1 species

[EX]***Sesamum indicum* L.** – Habit: Herb or subshrub. Habitat: Forest, grassland, roadside 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Indian Subcontinent.

## F97. PENAEACEAE
1 Genus, 1 species

***Olinia rochetiana* A.Juss.** – Habit: Shrub or tree. Habitat: Forest, fire degraded forest, 1680–3000 m. Vouchers: Ekkens DB 418 (EA), Eggeling 2484 (EA), Cheseny CMC 31 (EA), Napier ER 2535 (EA), Major & Lugard EJ 202 (EA), Jackson THE 1088 (EA), Tweedie DR 1287 (BR), Jackson 337 (EA), Rono et al. SAJIT-PR 0213 (EA, HIB). Native distribution range: Ethiopia to N Tanzania.

## F98. PHYLLANTHACEAE
2 Genera, 3 species

***Bridelia micrantha* (Hochst.) Baill.** – Habit: Shrub or tree. Habitat: Woodland, forest, along rivers, 1750–2400 m. Voucher: Jackson THE 346 (EA). Native distribution range: Tropical & S Africa, Mascarenes.

***Phyllanthus fischeri* Pax** – Habit: Shrub or herb. Habitat: Forest edges, 1650–2960 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Eritrea to E Central & E Tropical Africa.

***Phyllanthus nummulariifolius* Poir.** – Habit: Herb or shrub. Habitat: Woodland, wooded grassland, forest edge, 630–2650 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa.

## F99. PHYTOLACCACEAE

1 Genus, 1 species

***Phytolacca dodecandra* L'Hér.** – Habit: Climbing or scrambling shrub. Habitat: Riverine forest, 1650–2450 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Madagascar.

## F100. PIPERACEAE

2 Genera, 5 species

***Peperomia abyssinica* Miq.** – Habit: Epiphytic herb in leaf-litters. Habitat: Montane forest, 1600–2950 m. Vouchers: Bamps PRJ 6490 (BR), Rono et al. SAJIT-PR 0196 (EA, HIB). Native distribution range: Cameroon to Eritrea and Malawi.

***Peperomia retusa* A.Dietr.** – Habit: Epiphytic herb. Habitat: Mist forest, streams, rocky places, mossy trunks, 1400–2400 m. Voucher: Tweedie 3335 (EA), RH Goodwin 120 (GH). Native distribution range: Tropical & S Africa, Madagascar.

***Peperomia tetraphylla* Hook. & Arn.** – Habit: Epiphytic herb. Habitat: Forest, 1400–2450 m. Vouchers: Hedberg O (UPS), Rono et al. SAJIT-PR 0195 (EA, HIB). Native distribution range: Tropics & Subtropics.

***Piper capense* L.f.** – Habit: Shrub, subshrub, liana or herb. Habitat: Forest undergrowth, mixed bamboo-forest, 1200–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

[EX]***Piper umbellatum* L.** – Habit: Shrub or woody herb. Habitat: Moist forest, 1190–2100 m. Vouchers: Katende 651 (K), Tiyoy LM 1505 (K). Native distribution range: Mexico to Tropical America.

## F101. PITTOSPORACEAE

1 Genus, 2 species

***Pittosporum abyssinicum* Delile** – Habit: Tree. Habitat: Forest, 2250–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to E & E Central Tropical Africa.

***Pittosporum viridiflorum* Sims** – Habit: Tree or shrub. Habitat: Forest, bushland, riverine forest, 900–2550 m. Vouchers: Gardner HM 610 (EA), Katende AB 3603 (UPS). Native distribution range: Tropical & S Africa, Madagascar, Arabian Peninsula.

## F102. PLANTAGINACEAE

5 Genera, 11 species

**Callitriche keniensis* **Schotsman** – Habit: Aquatic herb. Habitat: Small pools, streams, 2100–4250 m. Vouchers: Wesche K 116 (EA), O Hedberg 939 (EA). Native distribution range: Uganda (Mt Elgon) to Kenya (Mountains).

EX*Callitriche stagnalis* **Scop.** – Habit: Aquatic herb. Habitat: Streams, ponds, crater moorland, 2150–4250 m. Vouchers: Hedberg O 939 (EA). Native distribution range: Macaronesia, NW Africa, Europe to Turkey.

*Misopates orontium* **(L.) Raf.** – Habit: Herb. Habitat: Grassland, cultivation, roadside, 1650–2730 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, Mediterranean to NE Sudan.

EX*Plantago lanceolata* **L.** – Habit: Herb. Habitat: Roadside, wooded grassland, 1650–2750 m. Voucher: Rono et al. SAJIT-PR 0072 (EA, HIB). Native distribution range: Macaronesia, N Africa to Mauritania, Temperate Eurasia.

*Plantago palmata* **Hook.f.** – Habit: Herb. Habitat: Montane forest, roadside, 1705–4030 m. Vouchers: Jack C 177 (EA), 228 (EA), Beentje HJ 1970 (EA), Mwangangi OM 323 (EA), Rono et al. SAJIT-PR 0165 (EA, HIB). Native distribution range: Bioko to Ethiopia and Zimbabwe.

*Sibthorpia europaea* **L.** – Habit: Herb. Habitat: Montane grassland, roadsides, 2150–3750 m. Vouchers: Hedberg sn, Dummer RA 3521 (EA), Hedberg 270 (EA), Kisalye N; van Heist 134 (K). Native distribution range: Azores, W & S Europe to Tropical African Mountains.

*Veronica abyssinica* **Fresen.** – Habit: Trailing herb. Habitat: Grassland, woodland edges, 1560–3900 m. Vouchers: Tothill BH 2335 (EA), Beentje HJ 1969 (EA, WAG), Hedberg O 989 (EA), Webster MVB 8943 (EA), Bush RZ 285 (EA), Taylor G 3723 (BR, EA). Native distribution range: Nigeria to Somalia and S Tropical Africa.

*Veronica anagallis-aquatica* **L.** – Habit: Herb. Habitat: Woodland, permanent shallow running waters, 1750–2400 m. Vouchers: Tweedie 2237 (EA), Hedberg O (UPS). Native distribution range: Temperate Eurasia to Tropical Mountains.

EX*Veronica calycina* **R.Br.** – Habit: Trailing herb. Habitat: Rocky upland soils, 2700–4300 m. Vouchers: Wesche K 88 (EA), Hedberg 9411 (EA). Native distribution range: SW Western Australia, SE Queensland to SE Australia.

*Veronica glandulosa* **Hochst. ex Benth.** – Habit: Trailing herb. Habitat: Upper montane forest, alpine, moorland, 2000–4100 m. Vouchers: Irwin PH 363 (EA), Hedberg O 857, 4549 (EA), Lye KA 5724 (EA), Webster MVB 8942 (EA), Tweedie DR 16, 69, 129, 4030 (EA), Dale IR 3187 (EA), Mwangangi OM 309 (EA), Bickford N 51 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

*Veronica javanica* **Blume** – Habit: Herb. Habitat: Grassland, 1800–2790 m. Voucher: Tweedie 1448 (EA). Native distribution range: Eritrea to S Tropical Africa, Tropical & Subtropical Asia.

## F103. PLUMBAGINACEAE

1 Genus, 1 species

***Plumbago montis-elgonis* Bullock** – Habit: Herb. Habitat: Forest, riverine, 1350–2170 m. Vouchers: Lugard C 657 (K), 637 (EA). Native distribution range: SW Ethiopia to NW Tanzania.

## F104. PODOSTEMACEAE

2 Genera, 2 species

****Ledermanniella maturiniana* Beentje** – Habit: Herb. Habitat: Waterfalls, fast flowing water, 800–1500 m. Voucher: Taylor G 3140 (EA, MO). Native distribution range: Kenya.

***Tristicha trifaria* Spreng.** – Habit: Aquatic herb. Habitat: Streams and rivers, woodland, 1300–2300 m. Voucher: Thomas AS 2013 (EA). Native distribution range: Tropics & Subtropics.

## F105. POLYGALACEAE

1 Genus, 10 species

***Polygala albida* Schinz** – Habit: Herb. Habitat: Roadsides, wooded grassland, cultivated fields, 1400–2300 m. Voucher: Symes YE 233 (EA). Native distribution range: E Ethiopia, Rwanda to S Africa.

***Polygala albida* subsp. *stanleyana* (Chodat) Paiva** – Habit: Herb. Habitat: Roadsides, woodland, cultivation, grassland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa to Namibia.

***Polygala erioptera* DC.** – Habit: Herb or shrublet. Habitat: Grassland, bushland, woodland, rock outcrop, 120–2000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Arabian Peninsula, India subcontinent to Indo-China, Africa.

***Polygala ohlendorfiana* Eckl. & Zeyh.** – Habit: Prostrate herb. Habitat: Burnt grassland, 1800–2750 m. Voucher: Jex-Blake B 1259 (EA). Native distribution range: Kenya to S Africa.

***Polygala persicariifolia* DC.** – Habit: Herb. Habitat: Grassland, wooded grassland, 1750–2250 m. Voucher: Tweedie 4096 (EA). Native distribution range: Tropical Africa, Tropical & Subtropical Asia to N Australia.

***Polygala petitiana* A.Rich.** – Habit: Herb. Habitat: Grassland, 1750–2400 m. Vouchers: Webster 8716 (EA), Jack C 34 (EA). Native distribution range: Tropical Africa.

***Polygala sadebeckiana* Gürke** – Habit: Herb or shrublet. Habitat: Forest, riverine forest, grassland, 1500–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Sudan to Mozambique.

***Polygala sparsiflora* var. *ukirensis* (Gürke) Paiva** – Habit: Herb. Habitat: Grassland, 1000–2250 m. Voucher: Major EJ & Lugard C 20 (EA). Native distribution range: Sierra Leone, Cameroon, Uganda to S Tropical Africa.

***Polygala sphenoptera* Fresen.** – Habit: Shrubby herb. Habitat: Forest, grassland 1750–3300 m. Vouchers: Bamps PRJ 6512 (EA, WAG), Lugard EJ 477 (EA), Jack C 71 (EA), Webster MVB 8714 (EA), Ross R 1360 (BR), Rono et al. SAJIT-PR 0098 (EA, HIB). Native distribution range: Eritrea to S Africa.

***Polygala steudneri* Chodat** – Habit: Herb. Habitat: Afro alpine grassland, rocky grassland, 3000–4050 m. Vouchers: Dummer RA 3365 (EA), Dale 3101, Wesche K 1827, Tweedie DR 54 (EA). Native distribution range: Ethiopia to N Tanzania.

## F106. POLYGONACEAE

5 Genera, 12 species

EX***Fallopia convolvulus* (L.) Á.Löve** – Habit: Climbing, twining herb. Habitat: Forest, cultivation, grassland, 1750–2250 m. Voucher: Irwin PH 228 (EA). Native distribution range: Macaronesia to N Africa, Temperate Eurasia.

***Harpagocarpus snowdenii* Hutch. & Dandy** – Habit: Climbing herb. Habitat: Forest, 1350–2400 m. Voucher: Katende T; Sheil D 2257 (K). Native distribution range: Cameroon to South Sudan and E Tanzania

***Oxygonum sinuatum* (Hochst. & Steud. ex Meisn.) Dammer** – Habit: Herb or shrub. Habitat: Cultivation, roadsides, 600–2250 m. Voucher: Symes YE 121 (EA). Native distribution range: Tropical & S Africa.

***Persicaria decipiens* (R.Br.) K.L.Wilson** – Habit: Herb. Habitat: Marshes, waterside, 1000–3170 m. Vouchers: Beentje HJ 1966 (EA, WAG), Lugard C & Lugard EJ 589 (EA). Native distribution range: Tropical & Subtropical Old World to Australasia.

***Persicaria nepalensis* (Meisn.) H.Gross** – Habit: Herb. Habitat: Forest edges, marshes, in cultivation, streams and rivers, 1140–2700 m. Vouchers: Katende T; Sheil, D 667 (K), van Heist, M. 570 (K), Hedberg O 105 (EA). Native distribution range: Eritrea to South Africa, Madagascar, Tropical & Subtropical Asia.

EX***Persicaria pulchra* Soják** – Habit: Herb. Habitat: Waterside plant, upto 2500 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: India to SE China and W & Central Malesia.

***Persicaria senegalensis* (Meisn.) Soják** – Habit: Herb. Habitat: Waterside, marshes, up to 2850 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Africa to Arabia Peninsula.

***Persicaria setosula* (A.Rich.) K.L.Wilson** – Habit: Herb. Habitat: Waterside, 1330–3000 m. Vouchers: Katende 1193 (K), Tiyoy L 1392 (K), Hedberg KO 32 (BR), Beentje HJ 1967 (EA), Jack C 500, 131 (EA), Hedberg O 109 (EA), Rono et al. SAJIT-PR 0181 (EA, HIB). Native distribution range: Tropical Africa to SW Syria.

***Rumex abyssinicus* Jacq.** – Habit: Herb. Habitat: Upland grassland, forest, 1600–3300 m. Voucher: Tiyoy LM 1389 (K). Native distribution range: Nigeria to Eritrea and S Tropical Africa, Madagascar.

***Rumex nepalensis* Spreng.** – Habit: Herb. Habitat: Montane grassland, woodland, forest, 1750–3000 m. Vouchers: Sheil and Vanheist 362 (K), Naiga; Lawrence 301 (K). Native distribution range: Cameroon to Eritrea and S Africa, Madagascar, SE Europe to China, Jawa.

***Rumex ruwenzoriensis* Chiov.** – Habit: Herb. Habitat: Upland grassland, upland moor, bamboo forest, 1950–3700 m. Voucher: Human observation sn (EA). Native distribution range: E Central & E Tropical Africa.

***Rumex steudelii* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Upland forest in streamside, roadside, 1200–3240 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Cameroon to Eritrea and S Africa, Madagascar, SE Europe to China.

## F107. PORTULACACEAE

1 Genus, 3 species

***Portulaca africana* (Danin & H.G.Baker) Danin** – Habit: Herb. Habitat: Grassland, in cultivation, ruderal sites, 500–2350 m. Voucher: Tweedie 1996 (EA). Native distribution range: Mauritania to Mali, Egypt to Malawi, India, S China.

***Portulaca oleracea* L.** – Habit: Herb. Habitat: Wet savanna, woodland, lower forest edge, 500–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Macaronesia, Tropical Africa, Mediterranean to Pakistan and Arabian Peninsula.

***Portulaca quadrifida* L.** – Habit: Herb. Habitat: Stony grassland, shrubland, 300–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical & Subtropical Old World to SW Pacific.

## F108. PRIMULACEAE

4 Genera, 9 species

***Ardisiandra wettsteinii* J.Wagner** – Habit: Herb. Habitat: Subalpine bushlands, moist bamboo thickets, 1580–3500 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to S Tropical Africa.

***Lysimachia adoensis* (Kunze) Klatt** – Habit: Herb. Habitat: Grassland, cultivation, 2015–3500 m. Voucher: Tweedie 855 (EA). Native distribution range: Eritrea to N Tanzania.

[EX]***Lysimachia arvensis* (L.) U.Manns & Anderb.** – Habit: Herb. Habitat: Grassland, bushland, 1400–2635 m. Voucher: Tweedie 849 (EA). Native distribution range: Europe to Central Asia and Himalaya, N Africa to Ethiopia and Arabian Peninsula.

***Lysimachia ruhmeriana* Vatke** – Habit: Herb. Habitat: Grasslands, woodland, riverine, marshes, forest, 2020–3500 m. Vouchers: Taylor G 3650, 3559 (EA), Tweedie 1408 (EA), Dummer RA 3561 (US). Native distribution range: Cameroon to Eritrea and S Africa, Madagascar.

***Lysimachia serpens* (Hochst. ex A.DC.) U.Manns & Anderb.** – Habit: Herb. Habitat: Forest, moorland, 3000–3150 m. Vouchers: Forbes 275 (EA), Thomas AS 2688 A (EA). Native distribution range: Ethiopia to E Zimbabwe.

[EX]***Lysimachia tenella* L.** – Habit: Herb. Habitat: Grassland, 1650–2040 m. Voucher: Gilbert MG & Tadesse M 6544 (EA). Native distribution range: W & S Europe, NW Africa.

***Maesa lanceolata* Forssk.** – Habit: Tree. Habitat: Grassland, forest, 1750–3000 m. Vouchers: Snowden JD 832 (EA), Taylor 3419 (MO). Native distribution range: Tropical & S Africa, Madagascar, Arabian Peninsula.

***Myrsine africana* L.** – Habit: Shrub, undershrub or tree. Habitat: Upland forest edge, open wooded grassland, 2250–3600 m. Vouchers: Wesche K 1008 (EA), Webster MVB 8821 (EA), Tweedie DR 1994 (B), Rono et al. SAJIT-PR 0036 (EA, HIB). Native distribution range: Azores, Eritrea to S Africa, Arabian Peninsula to China, Taiwan.

***Myrsine melanophloeos* R.Br. ex Sweet** – Habit: Tree or shrub. Habitat: Riverine, swamp forest, upland grassland, open woodland, 900–3750 m. Voucher: Eggeling 2453 (EA). Native distribution range: Nigeria to Ethiopia and S Africa, Comoros, Madagascar.

## F109. PROTEACEAE

2 Genera, 6 species

***Faurea rochetiana* Chiov. ex Pic.Serm.** – Habit: Shrub or small tree. Habitat: Wet savanna on rocky slops, 1750–2400 m. Voucher: Taylor G 3727 (EA). Native distribution range: Tropical & S Africa.

***Faurea saligna* Harv.** – Habit: Tree. Habitat: Forest, woodland, outcrop rock, 3000–3150 m. Voucher: JR Dale (MA). Native distribution range: South Sudan to S Africa.

***Protea caffra* Meisn.** – Habit: Shrub or tree. Habitat: Rock outcrop, grassland, woodland, 1000–2300 m. Vouchers: Taylor G (S), Bush RZ 278 (EA). Native distribution range: South Sudan to S Africa.

***Protea caffra* subsp. *kilimandscharica* (Engl.) Chisumpa & Brummitt** – Habit: Shrub or tree. Habitat: Forest, 2300–3700 m. Vouchers: Eggeling WJ 5739 (EA), Snowden JD 469 (EA). Native distribution range: E Central & E Tropical African Mountains.

***Protea gaguedi* J.F.Gmel.** – Habit: Large bush or small tree. Habitat: Bushland, tree grassland, 1500–2900 m. Vouchers: Gerti Lindblom (S), Snowden JD 1068 (EA), Rono et al. SAJIT-PR 0130 (EA, HIB). Native distribution range: Eritrea to S Africa.

***Protea madiensis* Oliv.** – Habit: Shrub or tree. Habitat: Grassland, woodlands, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: S Nigeria to Ethiopia and S Tropical Africa.

## F110. RANUNCULACEAE

5 Genera, 14 species

***Anemone thomsonii* Oliv.** – Habit: Herb. Habitat: Moist/boggy grassland, outcrop rocks, 2500–4000 m. Vouchers: Dale 3090 (EA), Tweedie 56 (EA), Lugard C 305 (EA), Liebenberg 1605 (EA), Manum 45 (O), Rono et al. SAJIT-PR 0141 (EA, HIB). Native distribution range: S Central Ethiopia to E DR Congo.

***Clematis brachiata* Thunb.** – Habit: Woody climber. Habitat: Forest, wooded grassland, 720–3150 m. Vouchers: E Hind 429 (BR), Jack C 18 (EA), Lugard C & Lugard EJ 65 (EA), Smeri PH 39 (EA), Symes YE 240 (EA). Native distribution range: Senegal, Cameroon to Ethiopia and S Africa, Madagascar.

***Clematis hirsuta* Guill. & Perr.** – Habit: Woody climber. Habitat: Forest, woodland grassland, 1750–2400 m. Voucher: PH Sruin 39 (BR). Native distribution range: Cape Verde, Sahara to Tropical Africa, SW Arabian Peninsula, S India.

***Clematis simensis* Fresen.** – Habit: Shrubby climber. Habitat: Forest, roadsides, grassland woodland, 1600–3250 m. Vouchers: Beentje HJ 1985 (EA, WAG), Irwin PH 375 (EA), Irving FR 38 (EA), Tweedie DR 87 (EA). Native distribution range: Tropical Africa, SW Arabian Peninsula, Madagascar.

***Clematis villosa* DC.** – Habit: Herb. Habitat: Burnt grassland, rock outcrop, 1500–2100 m. Voucher: Snowden JD 840 (BR). Native distribution range: S Uganda to Angola.

****Delphinium macrocentrum* Oliv.** – Habit: Herb. Habitat: Rocky grassland, moist bamboo thickets, 1650–3900 m. Vouchers: Tothill BH 2411 (EA), Allen T 3675 (EA), Hedberg O 4512 (EA), Bickford N 25 (EA), 41 (EA), Tweedie 13 (EA), Jack C 2643 (EA), Lugard C & Lugard EJ 26 (EA), Ritchie AT & Beentje 1998 (EA), Bogdan A 5407 (EA), Webster MVB 8711 (EA). Native distribution range: E Tropical Africa (Kenya Highlands, Mt Elgon), N Malawi.

****Delphinium wellbyi* Hemsl.** – Habit: Herb. Habitat: Grassland, 1200–1500 m. Vouchers: Tweedie 722 (EA), Greenway PJ & Daughty LR 8532 (EA). Native distribution range: Ethiopia, Central Kenya.

****Ranunculus aberdaricus* Ulbr.** – Habit: Herb. Habitat: Rare in wet alpine turf, bamboo thickets, 2550–3660 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Ethiopia, Kenya (Aberdare Mountains)

*****Ranunculus cryptanthus* Milne-Redh. & Turrill** – Habit: Herb. Habitat: Upland moor, 4050–4100 m. Vouchers: Taylor 3542 (EA), Hedberg K.O 1005 (EA, UPS, K, S). Native distribution range: E Tropical Africa (Mt Elgon).

***Ranunculus multifidus* Forssk.** – Habit: Herb. Habitat: Forest, stream sides, 1530–3450 m. Vouchers: Beentje HJ 1968 (WAG), Mwangangi OM 380 (BR), Rono et

al. SAJIT-PR 0235 (EA, HIB), Naiga 450 (UPS), Symes YE 251 (EA), Hamilton & Perrott 76/408 (EA). Native distribution range: Nigeria to Eritrea and S Africa, SW Arabian Peninsula, Madagascar.

***Ranunculus oreophytus* Delile** – Habit: Herb. Habitat: Forest, rocky clef, grassland, by streamside, upland moor, 2550–4200 m. Vouchers: Svein Manum 16 (LD), Mathama M & Gehrke B 137 (EA), Ekkens DB 413 (EA), Tweedie 12 (EA), Knox EB 3839, 3845 (EA). Native distribution range: Sudan to Tanzania.

***Ranunculus stagnalis* Hochst. ex A.Rich.** – Habit: Herb. Habitat: Upland moorland, 3000–4321 m. Vouchers: Mrs J Adamson 484 (EA), Muthama M & Berit Gehrke 142 (EA), Milne-Redhead E & Hedberg O 994 (EA). Native distribution range: Ethiopia to E DR Congo.

***Ranunculus volkensii* Engl.** – Habit: Herb. Habitat: Peaty grassland, 2550–3400 m. Vouchers: Dummer RA 3312 (K), Muthama M & Gehrke B 143 (EA), Knox EB 3840 (EA). Native distribution range: W Central Ethiopia, Mountains of E Central & E Tropical Africa.

***Thalictrum rhynchocarpum* Quart.-Dill. & A.Rich.** – Habit: Herb. Habitat: Path sides, forest, bushland on stream sides, grassland, 1550–3275 m. Vouchers: Lugard 660 (EA), Irwin PH 309 (EA), Rono et al. SAJIT-PR 0047 (EA, HIB). Native distribution range: Bioko to Ethiopia & S Africa.

## F111. RHAMNACEAE

4 Genera, 5 species

***Helinus mystacinus* E.Mey. ex Steud.** – Habit: Woody climber. Habitat: Wooded grassland, forest margin, secondary bushland, 1450–2400 m. Vouchers: Cheseny CM 1 (BR), Rono et al. SAJIT-PR 0070 (EA, HIB). Native distribution range: Eritrea to S Africa.

***Rhamnus prinoides* L'Hér.** – Habit: Shrub or tree. Habitat: Forest edges, evergreen bushlands, thickets, 1750–3700 m. Vouchers: Lugard 576 (EA), Bamps PRJ 6493 (WAG), Rono et al. SAJIT-PR 0015 (EA, HIB). Native distribution range: Cameroon to Eritrea & S Africa.

***Rhamnus staddo* A.Rich.** – Habit: Shrub or small tree. Habitat: Forest edges, bushland, woodland, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to Zimbabwe, Arabian Peninsula.

***Scutia myrtina* (Burm.f.) Kurz** – Habit: Shrub or small tree. Habitat: Forest edges, woodland, 1750–2400 m. Vouchers: Tweedie DR 2508 (BR), Taylor G 3430 (S), Jackson THE 323 (EA), Taiti S 588 (EA), Lugard C 621 (EA). Native distribution range: Ethiopia to S Africa, W Indian Ocean, India to China (S Yunnan, SW Guangxi) and Indo-China.

***Ziziphus abyssinica* Hochst. ex A.Rich.** – Habit: Tree or shrub. Habitat: Scattered-tree grassland, 700–2200 m. Voucher: Dale IR 3092 (BR). Native distribution range: Tropical Africa.

## F112. RHIZOPHORACEAE

1 Genus, 1 species

***Cassipourea malosana* (Baker) Alston** – Habit: Tree. Habitat: Forest, 2250–3000 m. Vouchers: Styles B 293 (BR), Rono et al. SAJIT-PR 0008 (EA, HIB). Native distribution range: Cameroon to Eritrea and S Africa.

## F113. ROSACEAE

5 Genera, 18 species

***Alchemilla abyssinica* Fres.** – Habit: Herb. Habitat: Heath, bamboo zones, 2700–4100 m. Voucher: Dummer RA 3559 (EA). Native distribution range: Ethiopia to Kenya.

***Alchemilla argyrophylla* Oliv.** – Habit: Herb. Habitat: Upland moor, moor grassland, often dominant in rocky grounds, 2250–4500 m. Voucher: Rono et al. SAJIT-PR 0250 (EA, HIB). Native distribution range: S Sudan to N Tanzania.

***Alchemilla cryptantha* Steud. ex A.Rich.** – Habit: Herb. Habitat: Alpine, montane grassland, 1725–3200 m. Vouchers: Strid A 3431 (EA), Hedberg O 104, 849 (EA), Knox EB 2635 (EA). Native distribution range: Cameroon to Eritrea and S Africa, Madagascar.

****Alchemilla elgonensis* Mildbr.** – Habit: Shrub. Habitat: Upland moor, moist bamboo-thickets, 2700–4350 m. Vouchers: Lugard 369 (EA), Tweedie 24 (EA), Hedberg KO 4452 (BR), Gillett JB 18437 (WAG), Liebenberg 1616 (EA), Sounders & Hancock 60 (EA), Thomson AS 559 (EA). Native distribution range: E Uganda to W Central Kenya.

***Alchemilla ellenbeckii* Engl.** – Habit: Herb or shrub. Habitat: Moist bamboo tickets, moor grassland, forest margin, 2100–4250 m. Vouchers: Hedberg O 843 (EA), Lugard EJ 2961 (EA), Knox EB 2621 (EA), Arnstein KL 5733 (EA), Hedberg O 4546 (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Alchemilla johnstonii* Oliv.** – Habit: Shrub. Habitat: Moist bamboo tickets, moor grassland, 2900–4321 m. Vouchers: Gillett JB 18448 (EA), Hedberg O 1954, 272, 1958 (EA), Knox EB 2610 (EA). Native distribution range: E Central & E Tropical African Mountains.

***Alchemilla kiwuensis* Engl.** – Habit: Herb. Habitat: Grassland, forest, bamboo thickets, 200–3000 m. Voucher: Rono et al. SAJIT-PR 0162 (EA, HIB). Native distribution range: Cameroon to Eritrea and S Africa.

***Alchemilla microbetula* T.C.E.Fr.** – Habit: Herb. Habitat: Rare alpine, 3500–4150 m. Vouchers: Hedberg O 896, 967, 4511, 4516, 4523 (EA), Granvik H sn (S). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Alchemilla volkensii* Engl.** – Habit: Herb. Habitat: Upland bushlands, moist bamboo thickets, 1500–2900 m. Vouchers: Tothill BH 2464, 2341 (EA), Thomas AS 531 (EA). Native distribution range: Uganda, N Tanzania.

***Cliffortia nitidula* R.E.Fr. & T.C.E.Fr.** – Habit: Shrub. Habitat: Moorland, 2920–3490 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to South Africa.

***Hagenia abyssinica* (Bruce) J.F.Gmel.** – Habit: Tree. Habitat: Forest, moist bamboo thickets, 2250–3600 m. Voucher: Tothill BH 2297 (MO). Native distribution range: Burundi, Eritrea, Ethiopia, Kenya, Malawi, Rwanda, Sudan, Tanzania, Uganda, Zambia, Zaïre.

***Prunus africana* (Hook.f.) Kalkman** – Habit: Tree. Habitat: Riverine Forest, 900–3000 m. Voucher: Lugard 445 (EA). Native distribution range: Ghana to Ethiopia and S Africa, Comoros, Madagascar.

***Rubus apetalus* Poir.** – Habit: Shrub. Habitat: Montane forests, bushlands, 1600–3000 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Nigeria to Eritrea and S Africa, W Indian Ocean, N Yemen.

*******Rubus friesiorum* subsp. *elgonensis* (Gust.) R.A.Graham** – Habit: Shrub. Habitat: Forest, 3300 m. Vouchers: Liebenburg 1645 (EA), Thomas AS 591 (EA), Synge 913 (EA), Dummer RA 3541 (MO), Synge PM 913 (K). Native distribution range: Uganda (Mt Elgon).

**EX***Rubus niveus* Thunb.** – Habit: shrub. Habitat: Disturbed woodlands, 2400–3000 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Afghanistan to Central China and Indo-China.

***Rubus pinnatus* Willd.** – Habit: Shrub. Habitat: Forest, moist bamboo thickets, 1950–2200 m. Voucher: Lugard 509 (EA). Native distribution range: Ascension, St Helena, Tropical & S Africa.

***Rubus steudneri* Schweinf.** – Habit: Shrub. Habitat: Montane forests, 2000–3480 m. Vouchers: Thomas AS 489 (EA), Tothill BH 238 (EA), Saundy & Hancock 103 (EA), Mwangangi OM 307 (BR), Rono et al. SAJIT-PR 0123, SAJIT-PR 0171 (EA, HIB). Native distribution range: Ethiopia to E Central Tropical Africa.

***Rubus volkensii* Engl.** – Habit: Herb or shrub. Habitat: Forest, bamboo zone, 2600–4100 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Ethiopia to N Tanzania.

## F114. RUBIACEAE

24 Genera, 58 species

***Anthospermum herbaceum* L.f.** – Habit: Herb. Habitat: Forest edges, grassland, woodland, heathland, 1560–3240 m. Vouchers: Tweedie 1997 (K), Wesche K 1438 (K), Irwin PH Mrs 57 (K), Lewis WH 5959 (K). Native distribution range: SW Arabian Peninsula, Eritrea to S Africa.

***Anthospermum usambarense* K.Schum.** – Habit: Shrub. Habitat: Alpine bushland, forest, 2150–4050 m. Vouchers: Dummer RA 3348 (MO), Dale 48 (MO). Native distribution range: S Sudan to S Tropical Africa.

***Canthium oligocarpum* Hiern** – Habit: Shrub or tree. Habitat: Forest, 1800–2600 m. Vouchers: Dale 88 (MO), 455 (EA). Native distribution range: Ethiopia to W Mozambique.

***Coffea eugenioides* S.Moore** – Habit: Bush or small tree. Habitat: Riverine forest, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: South Sudan to E Central & E Tropical Africa.

***Dolichopentas decora* (S.Moore) Karehed & B.Bremer** – Habit: Woody herb. Habitat: Wooded grassland, 1590–2700 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Tropical Africa.

***Dolichopentas longiflora* (Oliv.) Karehed & B.Bremer** – Habit: Woody herb. Habitat: Woodlands with combretum, 1590–2400 m. Vouchers: Holm Å 103 (S), Lewis WH 5962 (US), Rono et al. SAJIT-PR 0055 (EA, HIB). Native distribution range: E Central & E Tropical Africa to Malawi.

EX***Galium aparine* L.** – Habit: Climbing herb. Habitat: Cultivation, wasteland, 1600–2790 m. Voucher: Andersen R 89 (S). Native distribution range: Macaronesia to Temperate Eurasia.

***Galium aparinoides* Forssk.** – Habit: Herb. Habitat: Upland forest, rocky streams, grassland, 1679–3700 m. Vouchers: Tothill BH 2374 (EA), Leibenberg 1630 (EA), Knox EB 2641 (EA), Knox A.B 3777 (EA). Native distribution range: Eritrea to Tanzania, SW Arabian Peninsula.

***Galium glaciale* K.Krause** – Habit: Herb. Habitat: Alpine zone, along river banks 3510–4350 m. Vouchers: Wesche K 1135 (K), Hedberg O 892 (K). Native distribution range: DR Congo to E Tropical Africa.

***Galium ossirwaense* K.Krause** – Habit: Straggling herb. Habitat: Grassland, montane forest edge, 1900–3750 m. Vouchers: Lugard EJ 400a (K), Wesche K 462 (BR), Hooper SS; Townsend CC 1461 (K), Lisowski S 10577 (K), Hedberg O 4476 (EA, K), Hedberg O 889 (S), Liebenberg 1619 (EA, K). Native distribution range: E Tropical African Mountains to N Mozambique.

***Galium ruwenzoriense* (Cortesi) Ehrend. ex Hedberg** – Habit: Climbing herb. Habitat: Forest, forest clearing, alpine, moorland, rocky grounds, 2350–4200 m. Vouchers: Tothill BH 2258 (EA), Tweedie 2543 (EA), Lugard 365 (EA), Wesche K 10 (BR). Native distribution range: E Central & E Tropical African Mountains.

***Galium simense* Fresen.** – Habit: Climbing herb. Habitat: Wet grassland, woodland, forest, 1750–2700 m. Voucher: Tweedie 2412 (EA). Native distribution range: Tropical African Mountains.

EX***Galium tanganyikense* Ehrend. & Verdc.** – Habit: Herb. Habitat: Grassland, among rocks, streamsides, 2400–2820 m. Vouchers: Lugard EJ 365 (K). Native distribution range: Tanzania.

***Galium thunbergianum* Eckl. & Zeyh.** – Habit: Herb. Habitat: Montane forest, 2050–3750 m. Vouchers: Knox EB, 3836 (EA), Knox EB 3787 (EA), Dummer RA 3472 (US), Lugard EJ 365 (K). Native distribution range: Cape Verde, Cameroon Sudan and S Africa, Madagascar.

***Gardenia ternifolia* subsp. *jovis-tonantis* (Welw.) Verdc.** – Habit: Shrub or small tree. Habitat: Forest, grassland, woodland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

***Heinsenia diervilleoides* K.Schum.** – Habit: Shrub or small understory tree. Habitat: Forest edges, thickets, 800–2250 m. Vouchers: Thomson in Eggeling 3175 (EA), Eggeling WJ 3947 (MO). Native distribution range: S Sudan to Zimbabwe.

***Hymenodictyon floribundum* B.L.Rob.** – Habit: Shrub or small tree. Habitat: Outcrop rock, bushland, woodland, wooded grassland, 1800–2400 m. Vouchers: Tweedie 2633, Adamson J 453 (EA), Synnott TJ 541 (EA), Rono et al. SAJIT-PR 0093 (EA, HIB), JR Dale 3091 (MA). Native distribution range: Tropical Africa to NW Namibia.

***Keetia gueinzii* (Sond.) Bridson** – Habit: Shrub or liana. Habitat: Woodlands, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Cameroon to Ethiopia and S Africa.

***Kohautia aspera* (Heyne ex Roth) Bremek.** – Habit: Herb. Habitat: Grassland, open bushland, 1750–2250 m. Voucher: Tweedie 2008 (EA). Native distribution range: Cape Verde, Dry Tropical & S Africa, Arabian Peninsula, Pakistan to India.

***Kohautia coccinea* Royle** – Habit: Herb. Habitat: Grasslands, wet savanna, 1250–2500 m. Voucher: Lewis WH 5952 (US). Native distribution range: Tropical Africa, Yemen, Iran to Nepal.

***Oldenlandia corymbosa* L.** – Habit: Herb. Habitat: Short grassland, bushlands, shallow pans, 001–2500 m. Vouchers: Lewis WH 5977, 5953 (US). Native distribution range: Tropical & Subtropical Old World.

***Oldenlandia corymbosa* var. *linearis* (DC.) Verdc.** – Habit: Herb. Habitat: Grassland, 1750–2250 m. Vouchers: Lewis WH 5977 (EA), Tweedie EM 757 (K). Native distribution range: Africa, Indian Subcontinent.

***Oldenlandia corymbosa* var. *nana* (Bremek.) Verdc.** – Habit: Herb. Habitat: Short grassland, paddocks, path sides, 780–2280 m. Vouchers: Lewis WH 5970 (K), Lind EM 245 (K). Native distribution range: E Tropical Africa.

***Oldenlandia herbacea* (L.) Roxb.** – Habit: Herb. Habitat: Forest, grassland 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Africa, Indian Subcontinent to Andaman Islands.

***Oldenlandia monanthos* Hiern** – Habit: Mat forming herb. Habitat: Montane grassland, roadsides, 1350–3500 m. Vouchers: Dummer RA 8684 (EA), Wood OH 114 (EA), Tweedie 712 (EA), Synge PM 1064 (S). Native distribution range: Ethiopia to E Tropical Africa.

***Oldenlandia scopulorum* Bullock** – Habit: Herb. Habitat: Grassland, rock outcrop, 1200–2500 m. Vouchers: Lugard EJ; Lugard C 346 (K). Native distribution range: E Central & E Tropical Africa.

***Paraknoxia parviflora* (Stapf ex Verdc.) Verdc.** – Habit: herb. Habitat: Short grasslands, bushland, old cultivations, 350–2280 m. Vouchers: Lewis WH 5967 (EA, S) 5954 (US), Tweedie EM 515 (BR). Native distribution range: Central African Republic to Kenya and Zimbabwe.

***Pavetta abyssinica* Fresen.** – Habit: Bush or small tree. Habitat: Woodland, riverine forest, 1750–3000 m. Vouchers: Hamilton, PH 76/ 779 (U), Rono et al. SAJIT-PR 0178 (EA, HIB). Native distribution range: Eritrea to Tanzania.

***Pavetta oliveriana* Hiern** – Habit: Bush or small tree. Habitat: Riverine forest, woodland, 1750–2400 m. Voucher: Irwin PH 32 (WAG). Native distribution range: Eritrea to Burundi and Tanzania.

***Pavetta ternifolia* Hiern** – Habit: Shrub or small tree. Habitat: Riverine thickets, grassland, forest, woodland, 1150–1950 m. Voucher: Rono et al. SAJIT-PR 0191 (EA, HIB). Native distribution range: East Central & Eastern Tropical Africa.

***Pentanisia ouranogyne* S.Moore** – Habit: herb. Habitat: Disturbed grassland, along the track, 300–2400 m. Vouchers: Lewis WH 5965 (US), Holm Å 102 (S), Andersen R 76 (S). Native distribution range: Ethiopia to Tanzania.

***Pentanisia schweinfurthii* Hiern** – Habit: Pyrophytic herb. Habitat: Grassland, 840–2250 m. Vouchers: Evans James (EA). Native distribution range: Nigeria to South Sudan and S Tropical Africa.

***Pentas arvensis* Hiern** – Habit: Pyrophytic herb. Habitat: Grassland, 1200–1530 m. Voucher: James 1905 (EA). Native distribution range: Nigeria to South Sudan and SW Kenya.

***Pentas lanceolata* (Forssk.) Deflers** – Habit: Shrub or woody herb. Habitat: Forest, 1200–2830 m. Vouchers: Synge PM 1079 (S). Native distribution range: Ethiopia to Mozambique, Comoros, Arabian Peninsula.

[EX]***Pentas lanceolata* subsp. *quartiniana* (A.Rich) Verdc.** – Habit: Herb or subshrub. Habitat: Forest, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Eritrea to DR Congo.

***Pentas lanceolata* var. *leucaster* (K.Krause) Verdc.** – Habit: Herb or subshrub. Habitat: Forest margin, 1200–2830 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: E DR Congo to Ethiopia and N Tanzania.

***Pentas pubiflora* S.Moore** – Habit: Herb or shrubby herb. Habitat: Woodlands, montane and riverine forests, 1230–2550 m. Vouchers: Tweedie 1267 (EA), Lewis WH 5963 (US), Irwin PH 55 (S). Native distribution range: Cameroon to Uganda and Mozambique.

[**]***Pentas zanzibarica* var. *tenuifolia* Vatke** – Habit: Herb or shrubby herb. Habitat: Evergreen forest, 1800–2440 m. Voucher: Amani 9644 (EA). Native distribution range: Kenya (Trans-Nzoia).

***Phyllopentas schimperi* (Hochst.) Y.D.Zhou & Q.F.Wang** – Habit: Shrub or woody herb. Habitat: Forest edge, 1450–2710 m. Voucher: Rono et al. SAJIT-PR 0120 (EA, HIB). Native distribution range: Tropical Africa.

***Psychotria fractinervata* E.M.A.Petit** – Habit: Shrub or small tree. Habitat: Forest, 1500–2600 m. Vouchers: Wood 113b (EA, MO). Native distribution range: E Tropical Africa.

***Psychotria orophila* E.M.A.Petit** – Habit: Shrub or small tree. Habitat: Forest, 1650–3000 m. Vouchers: Wood C113 (EA), Dummer RA 3582 (EA), Snowden JD 1196 (EA), Hedberg O (WAG). Native distribution range: South Sudan to E Tropical Africa.

***Psydrax parviflorus* (Afzel.) Bridson** – Habit: Shrub or tree. Habitat: Forest, thicket, grassland, 1400–2250 m. Voucher: Jackson THE 322 (EA). Native distribution range: Tropical Africa.

***Psydrax parviflorus* subsp. *rubrocostatus* (Robyns) Bridson** – Habit: Shrub or tree. Habitat: Forest, 1750–2750 m. Vouchers: Thomson T 1798 (EA), St Clair-Thompson T 1798 (EA). Native distribution range: South Sudan to Malawi.

***Rothmannia manganjae* (Hiern) Keay** – Habit: Shrub or tree. Habitat: Riverine forest, woodland, 1750–2400 m. Voucher: Jex -Blake in CM 6864 (EA). Native distribution range: Cameroon, Kenya to S Tropical Africa.

***Rothmannia urcelliformis* Bullock ex Robyns** – Habit: Bush or small tree. Habitat: Riverine forest, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

***Rubia cordifolia* L.** – Habit: Climbing herb. Habitat: Woodland, 1240–3120 m. Voucher: Beentje HJ 1929 (WAG). Native distribution range: Greece, Sudan to S Africa, Asia.

***Rutidea orientalis* Bridson** – Habit: Shrub or climber. Habitat: Moist forest, 375–2400 m. Voucher: Eggeling 3627 (EA). Native distribution range: Kenya to S Tropical Africa.

***Rytigynia acuminatissima* Robyns** – Habit: Shrub or small tree. Habitat: Riverine forest understory, 1650–2400 m. Vouchers: Maitland 1231 & 1245 (EA), Dale in FD 3119 (EA), Hamilton & Perrott 76/770 (EA), Snowden JD 907/b (WAG). Native distribution range: E Central & E Tropical Africa.

***Rytigynia neglecta* Robyns** – Habit: Shrub or small tree. Habitat: Riverine forest, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Cameroon to Ethiopia and Kenya.

***Rytigynia uhligii* (K.Schum. & K.Krause) Verdc.** – Habit: Shrub or tree. Habitat: Riverine forest, woodland, 1750–2400 m. Voucher: Dale IR 3389 (BR). Native distribution range: Kenya to S Tropical Africa.

***Spermacoce minutiflora* (K.Schum.) Verdc.** – Habit: Herb. Habitat: Wooded grassland, 1500–2350 m. Vouchers: Lugard EJ 231 (K), Lewis WH 5971 (K), Tweedie 516, 739, 807, 2479, (K). Native distribution range: S Sudan to Kenya.

***Spermacoce princeae* (K.Schum.) Verdc.** – Habit: Herb. Habitat: Grassland, bamboo forest, forest, 2250–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa.

EX ***Spermacoce pusilla* Wall.** – Habit: Herb. Habitat: Grassland, woodland, roadsides, rocky areas, 1750–2250 m. Voucher: Lewis WH 5966 (US). Native distribution range: S China to Tropical Asia.

***Spermacoce sphaerostigma* Oliv.** – Habit: Herb. Habitat: Grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical Africa, Arabian Peninsula.

***Vangueria apiculata* K.Schum.** – Habit: Shrub or small tree. Habitat: Forest, grassland, riverine, marshes, rock outcrop, 2190–2251 m. Vouchers: Lugard 234A (EA), Rono et al. SAJIT-PR 0001 (EA, HIB). Native distribution range: Ethiopia to S Tropical Africa.

***Vangueria infausta* subsp. *rotundata* (Robyns) Verdc.** – Habit: Shrub or small tree. Habitat: Forest, bushlands, rocky thickets, 30–2100 m. Vouchers: Padwa JH 3 (EA), Rono et al. SAJIT-PR 0024 (EA, HIB). Native distribution range: Sudan to S Tropical Africa.

***Vangueria madagascariensis* J.F.Gmel.** – Habit: Shrub or small tree. Habitat: Riverine forest, woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Vangueria volkensii* K.Schum.** – Habit: Shrub, subscandent shrub or small tree. Habitat: Riverine forest, woodland, 1750–2400 m. Vouchers: Bridson D 65 (EA/BR/K/WAG), Mrs Tweedie 1315 (S), Andersen R 236 (S), Lugard C & Lugard EJ 622 (EA), Fairbairn G 894 (EA). Native distribution range: Ethiopia to S Tropical Africa.

## F115. RUTACEAE

2 Genera, 2 species

***Vepris nobilis* (Delile) Mziray** – Habit: Shrub or tree. Habitat: Lower edge of forest, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to S Tropical Africa.

***Zanthoxylum asiaticum* (L.) Appelhans, Groppo & J.Wen** – Habit: Shrub or liane. Habitat: Lower edge of forest, wooded grassland, bushland, 1750–2800 m. Vouchers: Jackson THE 302 (EA), Lugard C & Lugard EJ 537 (EA) Fack WE 284 (EA). Native distribution range: Ethiopia to Eswatini, W Indian Ocean, Tropical & Subtropical Asia.

## F116. SALICACEAE

6 Genera, 7 species

***Casearia battiscombei* R.E.Fr.** – Habit: Tree. Habitat: Upland moist forest, 2250–3000 m. Vouchers: St Clair-Thompson in Eggeling 3954 & 3955 (EA), Fairbairn G 3384 (BR). Native distribution range: E & S Tropical Africa.

***Dovyalis abyssinica* (A.Rich.) Warb.** – Habit: Shrub or tree. Habitat: Moist forest, open wooded grassland, 1750–3000 m. Vouchers: Snowden JD 1084 (EA), Bamps PRJ 6516 (EA), Hamilton & Perrott 76/364 (EA), Rono et al. SAJIT-PR 0050 (EA, HIB). Native distribution range: NE & E Tropical Africa to Malawi.

***Dovyalis macrocalyx* Warb.** – Habit: Shrub or small tree. Habitat: Moist Forest, bushland, wooded grassland, 1750–3000 m. Voucher: Major C & Lugard EJ 577 (EA). Native distribution range: S Sudan to S Tropical Africa.

***Flacourtia indica* (Burm.f.) Merr.** – Habit: Shrub or tree. Habitat: Woodland, wooded grassland, bushland, 2250–3000 m. Vouchers: Snowden JD 826 (EA), Major Jack 2857 (EA), Jackson THE 422 (MA), Trapnell CG 2367 (EA), Katende AB 3606 (MO), Rono et al. SAJIT-PR 0099 (EA, HIB). Native distribution range: Ethiopia to S Africa, SE China to Tropical Asia.

***Oncoba spinosa* Forssk.** – Habit: Shrub or tree. Habitat: Woodland, riverine forest, bushland, 1750–2400 m. Voucher: Padwa JH 2 (EA). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

***Salix mucronata* Thunb.** – Habit: Tree. Habitat: Riverine forest, bushland, grassland, 1550–2600 m. Vouchers: Dale U 11 (EA), Kimera 21 (EA), Thomas 2607 (EA). Native distribution range: Africa to Arabian Peninsula.

***Trimeria grandifolia* (Hochst.) Warb.** – Habit: Shrub or tree. Habitat: Woodland, riverine forest, wooded grassland, 1750–2450 m. Voucher: Jack C 263 (EA). Native distribution range: E Zimbabwe to S Africa.

## F117. SANTALACEAE

3 Genera, 7 species

***Osyris lanceolata* Hochst. & Steud.** – Habit: Shrub or a small tree. Habitat: Woodland, upland evergreen forest and mist forest, 1750–2700 m. Vouchers: Eggeling 2485 (EA), Rono et al. SAJIT-PR 0084 (EA, HIB). Native distribution range: S Iberian Peninsula Baleares, Canary Islands, Sahara to S Africa, Socotra, Indian Subcontinent to S China and Indo-China.

***Thesium kilimandscharicum* Engl.** – Habit: Herb. Habitat: Montane grassland, heath scrub, afro alpine zone, 2200–4200 m. Voucher: Jex-Blake in Bally 1955 (EA). Native distribution range: Kenya to N Malawi.

***Thesium mukense* A.W.Hill** – Habit: Herb. Habitat: Burnt grassland, 1800–2700 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: Kenya to S Africa.

***Thesium schweinfurthii* Engl.** – Habit: Herb. Habitat: Upland grassland, woodland, mixed bushland, 1050–2300 m. Voucher: Tweedie 3555 (EA). Native distribution range: Nigeria to W & S Ethiopia and Zambia.

***Viscum schimperi* Engl.** – Habit: Shrub. Habitat: Dry evergreen forest, bushland, 1160–2140 m. Voucher: Tweedie EM 1166 (K). Native distribution range: Eritrea to Tanzania, Arabian Peninsula.

***Viscum triflorum* DC.** – Habit: Shrub. Habitat: Forest, 100–2300 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: São Tomé, Central African Republic to N Somalia and S Africa, W Indian Ocean.

***Viscum tuberculatum* A.Rich.** – Habit: Shrub. Habitat: Dry evergreen forest, woodland, bushland, 1650–2400 m. Vouchers: Tweedie DR 130 (BR), Cheseny CM 19 (BR), Rono et al. SAJIT-PR 0061 (EA, HIB). Native distribution range: Eritrea to South Africa.

## F118. SAPINDACEAE

2 Genera, 5 species

***Allophylus abyssinicus* Radlk.** – Habit: Tree. Habitat: Woodland, moist forest, evergreen thickets, 1750–2550 m. Vouchers: Styles 298 (EA), Tweedie 2243 (EA). Native distribution range: Eritrea to S Tropical Africa.

***Allophylus africanus* P.Beauv.** – Habit: Shrub or tree. Habitat: Forest, grassland, 1750–2400 m. Vouchers: Tweedie 2415 (EA), Jackson THE 320 (EA), Rono et al. SAJIT-PR 0200 (EA, HIB). Native distribution range: Tropical & S Africa.

***Allophylus ferrugineus* Taub.** – Habit: Tree or shrub or climber. Habitat: Forest, stream sides, 1050–2400 m. Vouchers: Lugard Mrs C 671 (EA). Native distribution range: S Nigeria to Ethiopia and Namibia.

***Allophylus rubifolius* Engl.** – Habit: Shrub or medium sized tree. Habitat: Grassland, thickets, cultivations, riverine, 0–2250 m. Vouchers: Tweedie 2016 (EA), 2016B, Jackson THE 316 (EA). Native distribution range: Eritrea to S Africa, Arabian Peninsula.

***Deinbollia kilimandscharica* Taub.** – Habit: Small tree or shrub. Habitat: Evergreen forest, upland moist forest, 1100–2400 m. Vouchers: Snowden JD 796 (EA, MO). Native distribution range: Ethiopia to E Central & E Tropical Africa.

## F119. SAPOTACEAE

3 Genera, 3 species

***Aningeria adolfi-friederici* (Engl.) Robyns & Gilbert** – Habit: Tree. Habitat: Forest, 2250–3000 m. Vouchers: Eggeling WJ 3956 (EA, MO). Native distribution range: SW Ethiopia to Zimbabwe.

***Manilkara butugi* Chiov.** – Habit: Tree. Habitat: Upland forest, riverine forest, 1500–2300 m. Voucher: Eggeling WJ 5734 (EA). Native distribution range: Ethiopia to Tanzania.

***Mimusops kummel* Bruce ex A.DC.** – Habit: Tree or shrub. Habitat: Riverine forest, upland evergreen forest, 1200–2250 m. Voucher: Snowden JD 1066 (EA). Native distribution range: Tropical Africa.

## F120. SCROPHULARIACEAE

8 Genera, 12 species

***Buddleja polystachya* Fresen.** – Habit: Shrub. Habitat: Grassland, woodland, forest, 1750–3000 m. Vouchers: Bamps PRJ 6492 (WAG), Katende AB 3602 (MO), Beentje HJ 1926 (WAG), Rono et al. SAJIT-PR 0206 (EA, HIB). Native distribution range: NE Tropical Africa to N Tanzania, SW Arabian Peninsula.

***Cycniopsis humifusa* Engl.** – Habit: Herb. Habitat: Wet grassland, 1000–2500 m. Voucher: Evans James sn (EA). Native distribution range: Ethiopia to N Tanzania, and Yemen.

***Diclis bambuseti* R.E.Fr.** – Habit: Herb. Habitat: Forest, bamboo zone, 2000–3720 m. Vouchers: Tweedie 842 (BR), Rono et al. SAJIT-PR 0238, SAJIT-PR 0268 (EA, HIB). Native distribution range: SW Ethiopia to E Tropical Africa.

***Hebenstretia angolensis* Rolfe** – Habit: Herb or shrub. Habitat: Grassland, rocky heathland, 1600–4000 m. Vouchers: Wesche K 245 (EA), Taylor G 3450 (S), Rono et al. SAJIT-PR 0150 (EA, HIB). Native distribution range: Eritrea to S Africa.

***Hebenstretia dentata* L.** – Habit: Shrub. Habitat: Upper forest edge, moorland, 3000–4321 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Ethiopia to E Central & E Tropical Africa, South Africa.

***Limosella africana* Glück** – Habit: Herb. Habitat: Ephemeral pools, alpine peaty soils, 1600–4200 m. Vouchers: Lind EM 291 (EA), Forbes 280 (EA), Rono et al. SAJIT-PR 0039 (EA, HIB). Native distribution range: Cameroon, Mali, Eritrea to N Tanzania, Namibia to South Africa, Yemen.

***Limosella macrantha* R.E.Fr.** – Habit: Herb. Habitat: Moorland zone, upper forest margin, moorland, 2500–4300 m. Vouchers: Wood GHS 912(K), Taylor G 3670 (BR) 9670 (BR), Gillett JB 18480 (K, BR), Wesche K 1094 (EA). Native distribution range: SE Ethiopia to Rwanda and N Tanzania, Yemen.

***Limosella major* Diels** – Habit: Herb. Habitat: Temporary pools, grassland, 1800–2700 m. Voucher: Tweedie 2848 (EA). Native distribution range: Eritrea to S Africa.

***Rhabdotosperma brevipedicellata* (Engl.) Hartl** – Habit: Herb. Habitat: Upland grassland, woodland forest, 3600–4100 m. Voucher: Liebenberg (EA). Native distribution range: Ethiopia to E Central & E Tropical Africa.

***Rhabdotosperma scrophulariifolia* (Hochst.) Hartl** – Habit: Herb. Habitat: Montane grassland, upper forest margin, 1800–3600 m. Vouchers: Thomas AS 525 (EA), Lugard 491 (EA). Native distribution range: Cameroon, Ethiopia to Burundi and N Tanzania.

***Selago thomsonii* Rolfe** – Habit: Herb or shrub. Habitat: Dry subalpine heathland, 1860–3380 m. Vouchers: Hedberg O (UPS), James E sn (K). Native distribution range: Kenya to Tanzania.

***Zaluzianskya elgonensis* Hedberg** – Habit: Herb. Habitat: Alpine zone on rocky grounds, 3800 m. Voucher: Hedberg O 4478 (K). Native distribution range: SE Uganda, N Tanzania.

## F121. SOLANACEAE

5 Genera, 24 species

[EX]***Datura stramonium* L.** – Habit: Herb. Habitat: Wasteland, woodland, grassland, 1750–2400 m. Voucher: Tweedie 1176 (EA). Native distribution range: Texas to Central America, Caribbean.

***Discopodium penninervium* Hochst.** – Habit: Tree or small shrub. Habitat: Moorland, upper montane, woodland, 2100–3500 m. Vouchers: Wood 254 (EA), Katende & Lye 466 (EA), Tweedie 1103 (EA), Rono et al. SAJIT-PR 0212 (EA, HIB). Native distribution range: Benin to Eritrea and Mozambique.

[EX]***Physalis peruviana* L.** – Habit: Herb. Habitat: Cultivations, secondary bushland, forest, 900–2500 m. Vouchers: Lugard & Lugard 641 (EA), Tiyoy LM 1334 (MNHN). Native distribution range: Bolivia to W Brazil

***Solanum aculeastrum* Dunal** – Habit: Shrub or small tree. Habitat: Upland forest, 2170–2400 m. Vouchers: Lugard EJ 238 (K), Cheseny, CM 21 (K), Tweedie J 696 (K), Mwangangi OM 461 (K), Rono et al. SAJIT-PR 0104 (EA, HIB). Native distribution range: Nigeria to South Sudan and S Africa.

[EX]***Solanum aculeatissimum* Jacq.** – Habit: Herb or shrub. Habitat: Montane forest, 1425–2640 m. Vouchers: Tweedie EM 715 (K), Symes YE 521 (K), Hedberg, KO 280 (K). Native distribution range: SE & S Brazil to S Central Paraguay.

***Solanum anguivi* Lam.** – Habit: Woody herb. Habitat: Cultivation, 1230–2700 m. Vouchers: Lugard EJ 291 (K), Mwangangi OM; Kariuki F 375 (K), Katende T; Sheil D 1150 (K), Holm Å 91 (S), Hedberg O 279 (K), Synge PM1071 (NHMUK). Native distribution range: Tropical & S Africa, Comoros, Madagascar.

***Solanum campylacanthum* Hochst. ex A.Rich.** – Habit: Herb or shrub. Habitat: Wooded grassland, grassland, roadsides, cultivation, 1000–2000 m. Vouchers: Padwa JH 6 (K), Lugard EJ 90 (K). Native distribution range: Eritrea to S Africa.

[EX]***Solanum capsicoides* All.** – Habit: Herb or shrub. Habitat: Forest, woodland, 1750–3000 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: S Tropical America.

[EX]***Solanum dasyphyllum* Schumach. & Thonn.** – Habit: Woody herb. Habitat: Forest, 2250–3150 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Solanum giganteum* Jacq.** – Habit: Shrub. Habitat: Grassland, riverine, bamboo zone, thickets, secondary bushland, 800–2450 m. Vouchers: Dummer RA 3611 (K), Coll S 1664 (K). Native distribution range: Tropical & S Africa.

***Solanum incanum* L.** – Habit: Herb or shrub. Habitat: Wet savanna, woodland, 15–2400 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Africa, Arabian Peninsula, Iran to India.

***Solanum lanzae* J.-P.Lebrun & Stork** – Habit: Woody herb. Habitat: Bushland, thickets, 1200–2100 m. Voucher: Tweedie 1108(K). Native distribution range: Ethiopia to E Tropical Africa.

***Solanum mauense* Bitter** – Habit: Shrub. Habitat: Montane forest, 1650–2640 m. Vouchers: Tweedie 734 (K), Holm Å 92 (S), Jack Mrs C 186 (K). Native distribution range: Kenya to Tanzania.

[EX]***Solanum mauritianum* Scop.** – Habit: Shrub or small tree. Habitat: Forest paths and margins, river banks, 1150–2800 m. Voucher: Katende T; Sheil D 656 (K). Native distribution range: SE & S Brazil to Argentina (Buenos Aires).

***Solanum memphiticum* J.F.Gmel.** – Habit: Herb or subshrub. Habitat: Forest, bushlands, grassland, riverbanks, 950–2450 m. Vouchers: Tweedie 1068 (K), 1586(K). Native distribution range: Jordan to Sinai, Eritrea to E Central & E Tropical Africa, SW Arabian Peninsula.

***Solanum nakurense* C.H.Wright** – Habit: Herb or subshrub. Habitat: Evergreen upland bushland, 900–3050 m. Vouchers: Snowden JD 889, (NHMUK), 889/a (S), Katende AB 3660 (MO), Hedberg O (UPS). Native distribution range: Ethiopia to E Tropical Africa.

***Solanum nigriviolaceum* Bitter** – Habit: Climbing subshrub. Habitat: Montane forest, 2130–2990 m. Vouchers: Major EJ; Lugard EJ 35 (K), Tweedie 850 (K), George Taylor 3722 (BM), Gerh Lindblom sn (S), Bridson DM 69 (BR), Bridson DM 89 (K), Rono et al. SAJIT-PR 0102 (EA, HIB). Native distribution range: Kenya.

[EX]***Solanum nigrum* L.** – Habit: Herb. Habitat: Forest, woodland, grassland, shrubland, 0–3070 m. Vouchers: Synge PM 856 (NHMUK), Gerh Lindblom sn (S). Native distribution range: Eurasia, Macaronesia, N & NE Tropical Africa.

[EX]***Solanum pseudospinosum* C.H.Wright** – Habit: Herb. Habitat: Montane grassland, bushland, woodland, bamboo thickets, 2000–2300 m. Vouchers: Cyril Lugard EJ 492 (K), Symes YE 392 (K). Native distribution range: Bioko, W Cameroon

***Solanum runsoriense* C.H.Wright** – Habit: Shrub or liana, vine or herb. Habitat: Montane forest, 2400–3200 m. Vouchers: Sheil D 1813 (K), Synge PM 892 (BM), 1877 (BM), Tothill BH 2260 (K), Liebenberg LCC 1637 (K), Fishlock 43 (K), Samdy 14 (K), Samdy 14 (K). Native distribution range: E Central & E Tropical Africa.

***Solanum tarderemotum* Bitter** – Habit: Herb. Habitat: Moist forest margins, 550–2950 m. Vouchers: Lugard EJ 209 (K), Wesche K 500 (K), Katende T; Sheil D 1099 (K), Tiyoy L 1209 (K), Tweedie 725 (K), 1480 (K) 1481 (K). Native distribution range: Cape Verde, Tropical & S Africa.

***Solanum terminale* Forssk.** – Habit: Shrub, vine or liana. Habitat: Woodland, 1750–2400 m. Vouchers: Tweedie EM 714 (K), Snowden JD 889 (BR). Native distribution range: Tropical & S Africa, Arabian Peninsula.

[EX]***Solanum wendlandii* Hook.f.** – Habit: Climber or liana. Habitat: Roadsides, montane forest, 1650–1800 m. Voucher: Padwa JH 42 (K). Native distribution range: Mexico to S Tropical America

***Withania somnifera* (L.) Dunal** – Habit: Herb or shrub. Habitat: Bushlands, grassland, wooded grassland, forests, river-banks, 2780 m. Voucher: Andersen R 306 (S). Native distribution range: S Europe to Central China, Africa to Myanmar.

## F122. STILBACEAE

2 Genera, 2 species

***Halleria lucida* L.** – Habit: Shrub or small tree. Habitat: Undergrowth of montane forest and bushland, 900–2700 m. Vouchers: Dale 56 (EA), Bridson DM 71 (BR), Katende AB 3628 (MO), Bamps PRJ 6520 (BR, WAG), Tweedie DR 893 (BR), Rono et al. SAJIT-PR 0016 (EA, HIB). Native distribution range: Ethiopia to S Africa, Yemen.

***Nuxia congesta* R.Br.** – Habit: Tree. Habitat: Woodland, upland rain forest, 1750–2700 m. Vouchers: Tweedie 1369 (EA), Bamps PRJ 6517 (WAG, BR), Rono et al. SAJIT-PR 0003 (EA, HIB), Mulugeta Kebede 188 (EA). Native distribution range: Tropical & S Africa, SW Arabian Peninsula.

## F123. THYMELAEACEAE

1 Genus, 3 species

***Lasiosiphon glaucus* Fresen.** – Habit: Tree. Habitat: Forest, open woodland, 2250–3048 m. Vouchers: Wesche K 972 (K), Mwangangi OM 456 (BR), Lavranos J & Newton 17790 (BR), Irwin PH 40 (BR), Taylor G 3456 (BR), Dale IR 681 (EA). Native distribution range: Tropical Africa, S India, Sri Lanka.

***Lasiosiphon kraussianus* (Meisn.) Hutch. & Dalziel** – Habit: Herb. Habitat: Grassland, woodland, 1650–2650 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa.

***Lasiosiphon lampranthus* (Gilg)** – Habit: Shrub or tree. Habitat: Woodland, 1750–2400 m. Voucher: Chater-Jack 41 (EA). Native distribution range: Ethiopia to NW Tanzania.

## F124. ULMACEAE

1 Genus, 1 species

***Chaetachme aristata* Planch.** – Habit: Tree. Habitat: Woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Madagascar.

## F125. URTICACEAE

9 Genera, 11 species

***Australina flaccida* (A.Rich.) Wedd.** – Habit: Herb. Habitat: Stream banks, forest, 2500–2650 m. Vouchers: Tweedie 2410, 2677, 3334 (EA). Native distribution range: Ethiopia to Kenya.

***Droguetia debilis* Rendle** – Habit: Herb. Habitat: Forest, 1550–3090 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: E DR Congo to Kenya and N Tanzania.

***Droguetia iners* (Forssk.) Schweinf.** – Habit: Herb or subshrub. Habitat: Bamboo forest, upland moist forest, 1600–3250 m. Vouchers: Mwangangi OM 406 (BR), Tweedie EM 3330 (K), Naiga 252 (K). Native distribution range: Tropical Africa, SW Arabian Peninsula, South Africa, Madagascar.

***Girardinia diversifolia* (Link) Friis** – Habit: Herb. Habitat: Wet forest, 1200–2500 m. Voucher: Tweedie 2240 (EA). Native distribution range: Tropical & Subtropical Old World.

***Laportea alatipes* Hook.f.** – Habit: Herb. Habitat: Upper forest margin, bamboo thickets, 1400–3500 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Bioko, Cameroon to Ethiopia and S Africa.

***Parietaria debilis* G.Forst.** – Habit: Herb. Habitat: Upper forest margins, 2510–4200 m. Vouchers: Hedberg O 925 (EA), Taylor G 3541, 3699 (EA). Native distribution range: Old World.

***Pilea johnstonii* Oliv.** – Habit: Herb. Habitat: Forest, 1680–2910 m. Vouchers: Tweedie EM 3316 (K), 3332 (University of Alberta Museums), Snowden JD 945 (K). Native distribution range: SE Ethiopia to E Zimbabwe.

***Pilea rivularis* Wedd.** – Habit: Herb. Habitat: Montane forest, 1485–3100 m. Voucher: Hedberg O (UPS). Native distribution range: Nigeria to Ethiopia and S Africa, Comoros, Madagascar.

***Pouzolzia parasitica* Schweinf.** – Habit: Herb. Habitat: Montane moist forest, grassland, 900–2400 m. Voucher: Dawnskins 782 (EA). Native distribution range: Central America to Bolivia, Tropical & S Africa, SW Arabian Peninsula.

***Scepocarpus hypselodendron* (Hochst. ex A.Rich.) T.Well & A.K.Monro** – Habit: Climbing shrub or liana. Habitat: Woodland, moist grassland, forest, upper forest edge, 1750–3150 m. Vouchers: Tweedie EM 1557 (K), Rono et al. SAJIT-PR 0227 (EA, HIB). Native distribution range: Congo to Ethiopia and S Tropical Africa.

***Urtica massaica* Mildbr.** – Habit: Herb. Habitat: Montane forest, 2000–3400 m. Voucher: Rono et al. SAJIT-PR 0269 (EA, HIB). Native distribution range: E Central & E Tropical Africa.

## F126. VERBENACEAE

4 Genera, 8 species

EX***Lantana trifolia* L.** – Habit: Shrub or sub-shrubby herb. Habitat: Wet savanna, woodland, 1750–2400 m. Vouchers: Jackson THE 360 (EA), Stein W Bie (UPS), Rono et al. SAJIT-PR 0202 (EA, HIB). Native distribution range: Mexico to Tropical America.

***Lantana ukambensis* (Vatke) Verdc.** – Habit: Sub-shrubby herb. Habitat: Forest, wooded grassland, open woodland, 1750–2250 m. Voucher: Tweedie 1078 (EA). Native distribution range: Tropical Africa.

***Lippia abyssinica* (Otto & A.Dietr.) Cufod.** – Habit: Shrub or subshrub. Habitat: Forest, grassland, woodland, 1950–2250 m. Voucher: Lugard 109 (EA). Native distribution range: NE & E Tropical Africa to Angola.

***Lippia javanica* Spreng.** – Habit: Shrub. Habitat: Rocky woodland, forest, plantations, 1300–2350 m. Vouchers: Chandler 1007 (EA), Wood 433 (EA), SCL 36 (EA), Padwa JH 5 (EA), Hedberg O 1059 (EA), Webster MVB 8964 (EA), Dummer RA 3736 (EA, US). Native distribution range: Ethiopia to S Africa.

***Lippia woodii* Moldenke** – Habit: Herb or subshrub. Habitat: Burnt grassland, open woodland, wet savanna, 1550–2280 m. Vouchers: Holm Å 32 (S), Hedberg O (UPS). Native distribution range: South Sudan to South Africa.

***Priva curtisiae* Kobuski** – Habit: Herb. Habitat: Forest, grassland, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: NE & E Tropical Africa to Rwanda.

[EX]***Verbena brasiliensis* Vell.** – Habit: Herb. Habitat: Bushland, grassland, roadside, 1750–2350 m. Voucher: Rono et al. SAJIT-PR 0201 (EA, HIB). Native distribution range: Brazil to Chile.

***Verbena officinalis* L.** – Habit: Herb. Habitat: Grassland, bushland, woodland, 1500–2100 m. Vouchers: Tweedie 1529 (EA). Native distribution range: Old World to Australia

## F127. VIBURNACEAE

1 Genus, 1 species

***Sambucus africana* Standl.** – Habit: Shrubby herb. Habitat: Bamboo zones, montane rain-forest tracks, forest floor, upland grassland, 1750–3370 m. Voucher: Major EJ; Lugard C 427 (K), Elliot GF 12, 177 (K), Snowden JD 908 (EA), Beentje HJ 1984 (EA), Hedberg O 173 (EA). Native distribution range: Madeira, NW Africa, Europe to S Turkmenistan.

## F128. VIOLACEAE

1 Genus, 2 species

***Viola abyssinica* Steud. ex Oliv.** – Habit: Herb. Habitat: Upland forest, grassland, bushland, bamboo thickets, 1600–3740 m. Vouchers: Bridson D 63 (BR), Tweedie EM 1275, 815 (K), Rono et al. SAJIT-PR 0172 (EA, HIB). Native distribution range: Nigeria to Ethiopia and South Africa, Madagascar.

***Viola eminii* R.E.Fr.** – Habit: Herb. Habitat: Upland forest margin, grassland, moor, bamboo thickets, 2100–4050 m. Vouchers: Tweedie 1280 (K), Wesche K 1263 (EA), Granvik H 152 (S), Thorold CA 2760, 2740 (EA), Hedberg O 4556 (EA), Irwin PH 373 (EA), Bush RZ 242 (EA), Tweedie DR 5440 (EA), Bickford N 5 (EA), Dummer RA 3502 (UPS), Synge PM S 1883 (WAG), Rono et al. SAJIT-PR 0131 (EA, HIB). Native distribution range: South Sudan to Burundi and Tanzania.

## F129. VITACEAE

5 Genera, 13 species

***Ampelocissus africana* (Lour.) Merr.** – Habit: Liana. Habitat: Seasonal swampy grassland, woodland, riverine forest, 1800–2160 m. Voucher: Padwa JH 20 (EA). Native distribution range: Tropical Africa to Botswana.

***Cayratia gracilis* (Guill. & Perr.) Suess.** – Habit: Climber. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Tropical & S Africa, Yemen.

***Cissus petiolata* Hook.f.** – Habit: Liana. Habitat: Forest edge, riverine forest, rocky grounds, 790–1770 m. Voucher: Padwa JH 37 (EA). Native distribution range: Tropical Africa.

***Cyphostemma bambuseti* (Gilg & M.Brandt) Desc. ex Wild & R.B.Drumm.** – Habit: Climber. Habitat: Forest, bamboo forest, 1800–2100 m. Vouchers: Jackson THE 384 (EA), Lugard 343 (EA). Native distribution range: South Sudan to N Zambia.

***Cyphostemma cyphopetalum* (Fresen.) Desc. ex Wild & R.B.Drumm.** – Habit: Climbing herb. Habitat: Bushlands, evergreen forest, 470–2450 m. Voucher: Rono et al. SAJIT-PR 0086 (EA, HIB). Native distribution range: Cameroon to Eritrea and Zambia.

***Cyphostemma cyphopetalum* var. *nodiglandulosum* (T.C.E.Fr.) Verdc.** – Habit: Climbing herb. Habitat: Wet savanna and woodland, 1750–2400 m. Voucher: Tweedie EM (1976) (REF). Native distribution range: Kenya to N Tanzania.

***Cyphostemma heterotrichum* (Gilg & R.E.Fr.) Desc. ex Wild & R.B.Drumm.** – Habit: Herb. Habitat: Roadsides, forest, bushland, old cultivations, burnt grassland, 1600–2300 m. Voucher: Tweedie 1123 (EA). Native distribution range: Kenya to Zimbabwe.

***Cyphostemma junceum* (Webb) Desc. ex Wild & R.B.Drumm.** – Habit: Herb. Habitat: Burnt grassland, swamp edge, bushland, 1650–2280 m. Vouchers: Snowden JD 1050 (EA), Padwa JH 8 (EA). Native distribution range: Tropical Africa.

EX***Cyphostemma junceum* subsp. *jatrophoides* (Baker) Verdc.** – Habit: Herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Agnew ADQ (2013) (REF). Native distribution range: W Tropical Africa to Angola and Tanzania.

***Cyphostemma kilimandscharicum* (Gilg) Desc. ex Wild & R.B.Drumm.** – Habit: Climber herb. Habitat: Miost forest, 1600–3040 m. Voucher: Hedberg O (UPS). Native distribution range: SW Ethiopia to Zimbabwe.

***Cyphostemma serpens* (Hochst. ex A.Rich.) Desc.** – Habit: Climbing herb. Habitat: Wet savanna, 1750–2250 m. Voucher: Tweedie, E.M 1122 (K). Native distribution range: NE & E Tropical Africa to Burundi.

***Cyphostemma ukerewense* (Gilg) Desc.** – Habit: Climbing or prostrate herb. Habitat: grassland, secondary forest, 1110–2520 m. Vouchers: Tweedie 3285 (EA), Rono et al. SAJIT-PR 0081 (EA, HIB). Native distribution range: Cameroon to South Sudan and W Tanzania.

***Rhoicissus tridentata* (L.f.) Wild & R.B.Drumm** – Habit: Shrub or treelet or woody climber. Habitat: Forest, grassland, thickets and scrub, forest edge, woodland, 1750–2700 m. Vouchers: Hedberg O (UPS), Lugard EJ 283 (EA), Rono et al. SAJIT-PR 0100 (EA, HIB). Native distribution range: Eritrea to S Africa, SW Arabian Peninsula.

**F130. XIMENIACEAE**
1 Genus, 1 species

***Ximenia americana* L.** – Habit: Shrub or small tree. Habitat: Forest, woodland, 1750–2400 m. Vouchers: Snowden JD 848 (EA), Lind EM 5212 (EA), Padwa JH 21 (EA). Native distribution range: Tropics & Subtropics.

**F131. ZYGOPHYLLACEAE**
1 Genus, 1 species

***Tribulus terrestris* L.** – Habit: Herb. Habitat: Forest, paths, wet savanna, 10–2300 m. Vouchers: Tweedie EM (1976) (REF), Agnew ADQ (2013) (REF). Native distribution range: Old World.

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